

HF

5686

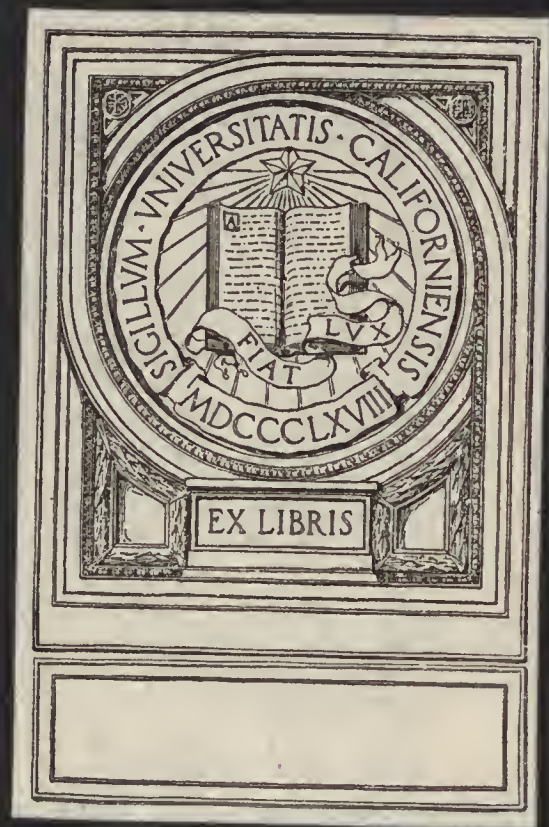
.L976

UC-NRLF



B 4 512 553

71 04189



Bookkeeping Systems
for a
Retail Lumber
Business

Div. of
CALIFORNIA

PUBLISHED BY THE

American Lumberman

431 South Dearborn Street

CHICAGO

Price, 35 Cents

Introduction.

The articles on retail lumber bookkeeping and various details of office system for the retail lumber yard were contributed in a prize contest held the latter part of 1910, and the articles and forms were published in the AMERICAN LUMBERMAN during 1911. Two articles are appended which were not contributed in this contest, but were prepared by an editorial representative of the AMERICAN LUMBERMAN as the result of visits to the two yards whose accounting and office systems are discussed.

No particular attempt has been made at rearrangement and classification of subjects treated in these articles, but a subject index has been added at the end of the book to facilitate convenient reference to any particular subject.

It will be noted that a great variety of different methods are represented in these articles, not all of which can be the best. They offer, however, a variety of ideas from which the reader may select those which appear best to fit his own particular circumstance or meet his own approval. Many of the contributors do not keep a running stock record, but a number of others do, and there are several distinct methods shown for keeping track of this matter successfully.

Since the publication of these articles there has been considerable demand for back copies of the paper containing them, and it is believed that a republication of this matter in a more convenient form will meet with much favor upon the part of many of our readers. Should any problem come up which does not appear to be successfully covered here, the Query and Comment Department of the AMERICAN LUMBERMAN is always open to inquiries upon such subjects.

Additional copies of this pamphlet will be furnished at 35 cents each, postpaid.

AMERICAN LUMBERMAN,
431 South Dearborn Street,
Chicago, Ill.

PRIZE BOOKKEEPING SYSTEMS IN A RETAIL BUSINESS.

BOOKKEEPING IN THE RETAIL YARD.

No section, no state has a monopoly of the men in the retail lumber business who are seeking advanced methods in their occupation. That has been demonstrated anew by the results of the bookkeeping contest conducted by the AMERICAN LUMBERMAN in which the prize winners are this week announced. Several months ago this publication offered a series of rewards for the best letters on this subject. The response was almost overwhelming, so nearly so that it has required time to determine the best. Letters came from every state, from England, from Canada and elsewhere; and this week the AMERICAN LUMBERMAN begins the presentation of the best thought of the best thinkers on this question.

To a Canadian goes the first award, and the others are distributed on a strict system of point-scoring to dealers in Pennsylvania, Indiana, Mississippi, North Dakota, Minnesota, Colorado and Arkansas. It is a matter of special gratification to the AMERICAN LUMBERMAN that the contest awakened such widespread interest, for where one wrote hundreds will read; and it is a matter of gratification as an indication of the universality of the great audience of American retailers of lumber whom it is the privilege of the AMERICAN LUMBERMAN each week to address.

Wherever lives a retailer, regardless of geographical location, there is perplexity over the question of bookkeeping—a desire to learn new and better methods of keeping a record of all classes of accounts. Better methods do not mean more detailed methods, a more intricate system. They mean accuracy, but economy of time and labor. They mean the use of short cuts without the sacrifice of system, the use of system without the loss of short cuts.

Effort has been made to judge these letters not from the viewpoint of the technical bookkeeper alone but from the viewpoint of the manager who employs him, or himself performs the work. No one man is prepared to furnish a complete system that will meet all these requirements; but from the experiences and ideas of three-score retailers who here present them the retailer will be able to evolve a bookkeeping method nearer the ideal. He

may have a system of his own which is good in all but one particular. The reading of these letters from practical retailers, as they appear from week to week, may supply the missing link.

One man's system may be strong in its stock record and weak somewhere else; another man may have a way of supplying customers with statements that is all but ideal, but faulty because laborious; but out of the ideas of many may be evolved a method that will combine the best elements of all.

The AMERICAN LUMBERMAN commends these letters to its retail readers and urges their careful examination as they appear from week to week; and it promises other features of a correspondingly helpful character in later issues.

Announcement of the Six Prize Winners —Two Extra Prizes Awarded—Honorary List—Canada and England Represented—First Prize Awarded and Forms.

In December the AMERICAN LUMBERMAN offered a series of four prizes for articles on retail lumber yard bookkeeping. Fifty-nine contributions were received in this contest, all of which were carefully considered. Scoring of comparative completeness and merit was done on the following basis:

	Points.
Purchase order system.....	10
Sales invoicing and delivery order system.....	15
System for customers' monthly statements.....	10
Sales records.....	15
Cash, bank and journal records.....	15
Ledger forms.....	5
Merchandise classification.....	5
Expense classification.....	5
Stock record and inventory system.....	15
Record for estimates and partial deliveries thereon...	5
Total	100

On this grading the prizes have been awarded as follows:

	Points.
First prize, \$20—William Patricks, Port Arthur, Ont.	78
Second prize, \$15—E. J. Lesher, Pitscarn, Pa.	77
Third prize, \$10—Gus. H. Tessman, Terre Haute, Ind.	73
Fourth prize, \$5—J. B. Hunt, Collins, Miss.	69
Tied with A. K. Grube, Deapolis, N. D., extra prize, \$5.....	69
S. Shaw, Dresden, Ont., special prize for a superior stock record system, \$5.....	67

Honorary Mention.

I. G. Iverson, Houston, Minn.	66
Earl P. Haubert, Philadelphia, Pa.	64
M. P. Anthony, Denver, Colo.	63
O. M. Hendrickson, Rochester, Ind.	60
C. E. Hopkins, Cotter, Ark.	60
Archle J. Clarke, Norwich, England.	59

It became necessary to award two extra prizes of \$5 each, one on account of the tie for fourth prize, and one a special prize for a stock record system which seems a little in advance of anything described by other competitors, although this contributor was beaten by a neck in a hot finish on other points in the scoring.

In addition to the honor list here printed there are many valuable ideas in the other contributions, all of which will be culled and presented for consideration in due course. A large percentage of the systems submitted were adequate as to accuracy in handling the personal accounts, but there was wide variance in the amount of labor required. The element of time has been considered material because in most cases it is essential that the books require as little labor as possible; and it was for this reason that the highest scoring was given to the features which represent the greatest saving of labor, in handling the greater number of items, such as invoicing, monthly statements etc. Theoretically the questions of merchandise classification and expense classification should have been given higher scores, but these were held down because of a desire to base the

Returning to the customer's invoice, form No. 1, a triplicate of the left side of the invoice is made on manila cardboard as a yard order. In filling the invoice in the first place only the order columns are filled and when the yard order comes back, if any items of the order are not filled or not fully filled, the amount actually delivered is extended and priced.

Form 2 shows a detailed monthly statement to customers. S. S. No. here means sales statement number and only one line of the monthly statement is used for each sales statement or invoice. This statement is designed for taking care of separate accounts for two or more yards in the same set of statements. For the purposes of a single yard the same thing would be accomplished with the use of but three columns, one for lumber, one for building material and one for a total of these two.

At the end of the month as described, the current month's charges are posted to the customer's ledger account and the total of these ledger accounts should then balance with the account of customers on the journal.

Taken altogether the system here described gives the most complete results with a minimum of labor. Divid-

The best bookkeeping method is that which accomplishes the most complete results in the simplest manner, and the system herein described deserves careful study because of its close approach to the ideal in these respects.

SECOND PRIZE LETTER.

Editors AMERICAN LUMBERMAN: The accurate keeping of accounts is a proposition of vital importance to every up-to-date merchant. Accurate accounting increases in necessity and importance in proportion as the merchant's competition and sources of loss increase and as his margins of profit decrease. An accurate accounting system eliminates guesswork and puts the merchant's feet upon the solid rock of actual fact. He knows the details of his business, knows exactly where he stands, and just what his limitations are.

Form 5, to go across two pages. Column widths not drawn to scale.

LESHER LUMBER & SUPPLY CO., INC.										No. 425									
DATE	TIME	FILED	DESCRIPTION	ITEM	TOTAL	LUMBER AND MILLWORK	BUILDERS' SUPPLIES	HARDWARE											
9	3		<i>J.B. Smith</i>																
			<i>20 lbs 2x4-18 from 240 @ 30</i>																
			<i>12 lbs 1x12-16 sis. 192 @ 25</i>																
			<i>90 lbs 1x8 #2 W.P. 53 @ 40</i>																
			<i>10 lbs 5/8 angle @ 45</i>																
			<i>Blades Scaffolds</i>																
			<i>H. Edwards</i>																
9	2		<i>C.W. Plush</i>																
			<i>1 lb 1x4-16 #2 W.P.</i>																
12	2		<i>G.B. Smith Conts 253</i>																
			<i>S. Jones for Contract</i>																

Fig. 1. Sales Journal. Loose leaf 13x17, with 3 1/2-inch loose leaf margin at left. Three merchandisc departments, with blank columns for additional departments if desired. Last entry summarizes Fig. 2.

Recent years have seen great development in the art of systematizing, and in many instances the matter has been carried to the extreme limit with the result that the business has been overburdened with a topheavy, cumbersome system of accounting that really retards rather than facilitates the daily routine, and in many cases is so complicated that a Philadelphia lawyer could not unravel it. What every retail lumberman needs is a system that will give him an accurate accounting of his business in detail, and which will be simple, clearcut and devoid of useless complicated machinery. He wants a system that is inexpensive in operation. Our system is the result of several years of evolution and fills the bill to our entire satisfaction. We use the double entry ledger and cashbook. It is assumed that all are reasonably familiar with the double entry theory, so I take no time to discuss that feature. Our outfit entire consists of duplicate estimate book, triplicate delivery-ticket machine, daybook, sales journal, journal, ledger, cashbook, voucher record and billing stationery. As will be seen later, our entries in the daybook, journal and cashbook are comparatively few, consequently the books do not fill very rapidly and these volumes are of the standard-bound type; on the other hand, the sales journal and ledger fill up quite rapidly and therefore we use these in the looseleaf form. A loose leaf ledger, as in fact any other loose leaf book, consists of two volumes, a current volume and a transfer volume, in each of which the leaves are indexed. While an account is active it is kept in the current binder, each account having a full page of its own. When the account

has been closed it is withdrawn from the current ledger and placed in the transfer volume. If the account is subsequently renewed by other purchases, the page is returned to the current ledger. Thus the loose leaf system provides a perpetual record which can be expanded indefinitely.

We have two different forms of sales journal sheets, size

LESHER LUMBER & SUPPLY CO., INC.										No. 253									
DATE	TIME	FILED	DESCRIPTION	ITEM	TOTAL	LUMBER AND MILLWORK	BUILDERS' SUPPLIES	HARDWARE		DATE	TIME	FILED	DESCRIPTION	ITEM	TOTAL	LUMBER AND MILLWORK	BUILDERS' SUPPLIES	HARDWARE	
15			<i>2x8-16 Hume</i>							5	30		<i>1200 Climbing Bricks</i>						
33			<i>2x6-18 "</i>							12	30		<i>6 Pa 2x8-14 Hume</i>						
70			<i>2x4-18 "</i>							15	30		<i>15 - 2x4-12</i>						
35			<i>2x4-16 "</i>							26	30		<i>264 - 5/8 4x8 rails</i>						
27			<i>2x8-16 Hume</i>							23	30		<i>235 lb 1x5-W.P.</i>						
73			<i>#2 W.P. Fly</i>							2	30		<i>2 Kg. 8d nails</i>						
20			<i>2x8-16 Hume</i>										<i>Plum Green</i>						
42			<i>6x6-14-5 Pa #2</i>																
165			<i>8 S.W. base</i>																
280			<i>1x5 Cg. Oct 12</i>																
320			<i>1/2 24</i>																
36			<i>1/2 x 4 W. Steel</i>																
32			<i>1x4 spruce</i>																
5			<i>5m. Posts</i>																
6			<i>1/2 x 3-16</i>																

Fig. 2. Contract sales journal. Size same as Fig. 1, loose-leaf. Summary "A" is produced from Fig. 3, noted here and posted to Fig. 1.

16x16 inches, one for the current sales (Fig. 1) and one for the contract sales (Fig. 2). By contract sales, we mean house and barn bills etc., those sales of quantities upon which a lump price has been made. In all our wagon deliveries we use the triplicate ticket. Our outfit is built with a receptacle, under lock and key, which holds one of the triplicate copies of each entry made. The other two are turned out of the machine and sent with the teamster who delivers the load. The teamster presents these two tickets to the customer, one of which he—the customer—retains, the other he signs as a receipt for the stuff and returns the same by the teamster to the office, where it is filed for future reference if needed. The bookkeeper uses the ticket taken from the inside of the machine as his original entry. From these tickets he posts to the sales journal, as indicated in Fig. 1, giving ticket number in each case. These tickets are then filed numerically and may be referred to readily at any time. It will be noticed that there are several columns for distribution of the sales on the sales journal sheet. This permits of extension to the proper department, and at the end of the month the addition gives not only the total sales for the month but the sales for the three respective departments—lumber and millwork, builders' supplies and hardware. This feature may be elaborated upon to any extent desired.

Handling Contract Sales.

We handle each contract sale or house bill complete as a single sale, charging it up in the sales journal sheet after all deliveries have been made. When a customer presents a lumber bill for figures, we copy it in duplicate in the estimate book and after figuring it there give him the dupli-

cate copy with the extensions torn off. If the job comes our way, this bill is immediately copied upon a contract sales sheet as illustrated in Fig. 2, each separate job being given a sheet of its own. As deliveries are made on this job, the quantities are entered in the little squares as shown; the date is set at the head of the column and on each delivery the number of the delivery ticket is shown, together with the quantity of each particular item. Thus at a glance we are able to tell Mr. Smith how much 2x4—18's have been delivered, or any other detail of his bill. Anything that is not included in Mr. Smith's original bill, but which is furnished on this job, is entered in the "Extra list." When the job is finished, we use statement form Fig. 3 and proceed to make out Mr. Smith's bill in duplicate, first heading the list with the original estimated price and listing below it all items on the original estimate on which there are either extras or credits. After this the extras, none of which were included in the estimate, are recorded and classified and the statement thus made up. A comparison of Figs. 2 and 3 will make this clear. This is then summarized and totaled on contract sheet at "A," Fig. 2, and from here posted to the regular sales sheet upon that date as shown at "B" in Fig. 1. The contract sheet, Fig. 2, is then filed in the transfer journal and that particular case is out of the way. Small sales are first entered in the daybook and from these to the sales journal; this is done merely to keep the sales journal in neater condition than would otherwise be possible.

In our business cash sales are not many and we usually

THREE YARDS:							
Second St., Pitcairn, Pa. Bell Phone 367 Wilmerding Bristol Ave., Trafford, Pa. " 99 E 24 Versailles Ave., Wall, Pa. " 69 L							
LESHER LUMBER AND SUPPLY COMPANY							
Date	Material	Estimate	Delivered	Balance	Charge	Credit	Net Total
	To original Estimate				330.00		
	2x8-100	45	47	2	1.12		
	2x6-12	1.00	32 c	1			
	3 Ton R. M. P. Boards	27.00					
	20 doz S. L. Lumber	4.40			41.00		
	2 1/2 doz nails	6.00					
	2 1/2 " 6" plus Ring	20			630		
					415.41	369	
					711.77		

Fig. 3. Customers Final Statement on Contract Sale. Size 10x17. Quantities taken from Fig. 2, priced and extended. Below the break the items are extras and should be in the second or Delivered column.

record them on a page in the daybook and enter in the sales journal at the end of the week. Having entered the Smith contract sale on our sales sheet, Fig. 1, we now have a fair sample of the entries which fill up the current sheets of the sales journal. For the sake of illustration we will let Fig. 1 represent a whole month's sales transactions. In ordinary double entry bookkeeping as taught in the schools, we would make each of the entries in a journal and from there post as follows:

Dr. J. Smith.....	\$19.32	Cr. Mdse.....	\$19.32
H. M. Kilne.....	19.00	Cr. Mdse.....	19.00
Central hotel	18.84	Cr. Mdse.....	18.84

In each case the separate debit and its respective credit would be made. We economize here by posting our debit entries to their respective places daily; using the loose leaf ledger, our folio is indicated by initial letters instead of page number. Our credit postings are not made until the end of the month, when we get our totals. In this case our total sales amount to \$537.24, composed of lumber and millwork \$426.45; builders' supplies \$88.52; hardware \$22.27. The sum of these last three must balance the total. We now turn to page in the ledger devoted to lumber and millwork sales and credit "by August sales \$426.45." Likewise builders' supplies account gets \$88.52 and hardware \$22.27. All our invoices paid are likewise debited to these respective accounts from the voucher record as will be ex-

plained later, and at the end of each year the profit on each line determined, the accounts being closed into the merchantise account and from there to the loss and gain account.

The Voucher Check System.

In paying our bills we use the voucher check system. As bills and invoices are received they are filed in a vertical file in a folder labeled "Invoices pending." When the stock arrives and is checked up the invoice is marked O K, freight bill is attached, and any correction or notation is made thereon, and if any adjustments are to be made they are attended to, and when satisfactory the invoice with all data attached is passed to another folder labeled "Bills and Invoices Payable." When payday arrives we settle up, using the voucher check form, Fig. 4. The voucher contains a complete record of each transaction and is returned from the bank and filed as a receipt. The vouchers are made up in book form similar to any ordinary check book with stub for keeping bank balance straight. The vouchers are entered in the voucher record, Fig. 5, and extensions made as indicated to their respective departments. As will be seen, the voucher record sheet has separate columns for each class of expenditure. As we separated our sales into three departments—lumber and millwork, builders' supplies and hardware—we likewise keep record of our invoices as paid. Under "chattels" we take care of all expenditures for

LESHER LUMBER & SUPPLY CO., PITCAIRN, PA. Dr. No. 1638

To P. R. R. Co
Pitcairn Pa

FOR AMOUNT OF ACCOUNT
AS HEREON TABULATED OR
ATTACHED

4 yr Bill # 11457 25
Can CB & L 43968 129.80
Bill # 11884 8.04
C C & O - # 1377 28.52
Bill # 12033 28
" 12170 35
151.29

EXAMINED AND FOUND CORRECT.

Pitcairn, Pa. 9/12 1910 S. G. B

Second National Bank
PITCAIRN, PA.

PAY TO THE ORDER OF P. R. R.
One hundred fifty one and 29/100 Dollars (\$151.29)

LESHER LUMBER & SUPPLY CO.
Per John Smith Treas.

IN FULL PAYMENT OF ABOVE ACCOUNT

Fig. 4. Face of voucher form. Size 8x9 wide; some blank lines omitted in engraving.

anything that is of permanent value, and have dissected our expense account into so many parts that it is pretty hard for the stray nickels and dimes to escape us. An example will serve to show how this performs the services of a "bulldog on the woodpile." Formerly we paid our freight and demurrage bills all in one and let it go at that. In 1907 we used the distribution system for the first time and found that our demurrage for that year amounted to \$87. This leak having been revealed, we determined to plug it up. In 1908 our expenses in this direction were \$5; in 1909, \$6 and in 1910, \$3; a clean saving each year of a month's salary for a good man. The entries on the voucher record are made direct from the voucher before the latter is mailed out. A comparison of Figs. 4 and 5 will make this clear. At the end of the month the sheet is totaled as shown and totals entered in the journal, from whence posted to cash book and ledger and at the end of the year the inventory is taken and the books closed in the usual manner. At the end of each month a trial balance is taken and thus each month's work is proved up.

Our stock record machinery consists of stock cards, Fig. 6, weekly sales memo sheets and stock balance sheets, sections of which are shown in Figs. 7 and 8 respectively. Each is ruled to accommodate 420 different items of stock. The stock cards are ruled as shown in the illustration. Each specific item in our stock is given its individual card. Cards are ruled on both sides and when these are full the totals are carried forward on a new one. Reference to Fig. 6 shows that on January 12, 1910, we had in stock

DATE 1910.	STOCK RECEIVED		DELIV- ERED.	BAL- ANCE
1/12 300	459	21.00	1/5-56	
1/15 22R	300	21.50	1/7-75	
1/16 42			1/7-99	
			1/25-100	
1/15	759		330	429
			1/2-72	
			X 1/4 54	
1/12	759		456	303
1/27 22R	150	21.00		
1/28 42				

Fig. 6. Top of stock record card 4x8 3-4, one used for each stock item. Filed on side, but reads up-right. Manila tag stock, printed both sides.

459 pieces 2x4—10 which cost us \$21 a thousand; on January 16 we received 300 pieces at \$21.50; week ending January 5 sold fifty-six pieces; January 8, seventy-five pieces etc. On January 25, striking a balance, we find that we have received 759 pieces, sold 330 pieces and have a balance of 429 pieces. Thus by carrying both "stock received" and "stock delivered" columns forward in total, at the end of the year we have a summary of receipts and sales in terms of pieces or board feet. The items in the "stock received" column are entered from the invoices as soon as they are O K'd. In posting each day's sales, a summary of the items is made and recorded on sheet Fig. 7; for example, week ended February 19, 1910, shows that on Monday eleven pieces 2x4—10 were sold; on Wednesday twenty-one pieces; on Friday, ten pieces; and on Saturday, twelve pieces, making a total for the week of fifty-four pieces. This total is set down on the stock card, Fig. 6, in delivery column at its respective date "X." At the end of the week sheet 7 is filed and a new one is started. Fig. 8 shows our "stock balance" sheet. Using this form on the 1st and 15th of each month, we go through our contract journal and list in column 2 all stuff contracted for which has not been delivered. Then we list from the stock cards, in column 1 all items on hand. Next we strike our balance and can tell at a glance whether we have a surplus or whether we are oversold on any particular item, namely: Fig. 8 shows that on January 25 we have on hand 429 pieces 2x4—10 (taken from Fig. 6), that we have orders for 116 pieces and a surplus after all orders have been delivered of

VOUCHER REGISTER SCHEME SUBMITTED BY R. J. LEESE.

				INVOICES.			CHATELAIN					EXPENSES																
DATE	NO.	FAVOR OF	AMT.	DR.	HWG.	ELDO. MAIL.	Rollg Stock	Horses	Off ice Fixts.	Harness	Tools	Mohry	R. S. Rep.	Shoeing & Vet.	Feed	Harness Rep.	Teamstr. Wages	Office Salaries	Office Exp	Postage	Trawl Exp	Advg	Frt Exp	Fuel&Est Exp	Notes Pay	Bank Int & Diact	Insurance	Car Serv
1910																												
Sept 10	1637	Pago & Mahalo	40-									40-																
"	30	P. H. Cunningham	51.30			51.30																						
11	31	Nath Ins. Co	50-																								50-	
"	32	Toby & Spelman	50-	50-																								
"	33	P. H. Cunningham	32.50							32.50																		
"	34	Smith & Spelman	11.96																			11.96						
"	35	Smith & Spelman	38.74			38.74																						
15	36	D. H. Helgerson	92-											92-														
"	37	Cornst & Co	88.74		88.74																							
"	38	P. H. Cunningham	151.24																				151.24					
"	39	Cornst & Co	56.40			56.40																						
"	40	Wm. D. Boyd Co	456	456-																								
		Totals	1123.49	506-	88.74	146.05				32.50		40-		97-								11.96	151.24				50-	

Fig. 5. Voucher Register or Purchase Record, Distributing Merchandise and Expenses paid through bank. Sketch does not show working size. Note that voucher in Fig. 4 is entered here near the bottom. Totals post to journal.

313 pieces, likewise we find that we are oversold on 2x4—14 to the extent of twenty-five pieces.

We find that our system keeps us right in touch with the actual condition of our business, meets every demand put upon it, and we would not change it unless by so doing we could better it.

Having been left at the 'quarter-pole on a previous occasion when competing with our fellow retailers in a similar contest, we know we're travelling in fast company and after seeing the results of this contest, may be obliged to do some more evolving.

E. J. LESHER, Secretary,
Leshner Lumber & Supply Company.

EDITORIAL DISCUSSION.

The check voucher system here described is most excellent and deserves careful attention. It provides a good classification of expenses, with extra columns for use if needed, one of which already has been added for "Car Service" or demurrage, as referred to in the article. Merchandise is classified in three departments, and all that is lacking is an adequate method of distributing expenses upon the three classes of merchandise. This, however, no main set of books can do, because the expense accounts are multiplied by the merchandise classifications, and instead of fifteen expense accounts as here shown forty-five would be required. Notes Payable column if located separately from the expense columns would make a better arrangement, as this is of course not an expense but a liability. The footing of the voucher record is entered on the journal in a single entry for the week or month, whatever the period may be.

The sales journal, Fig. 1, is of customary form with extra columns to provide the merchandise classification. Where cash sales are an important feature it might be

No. 1638

\$ 151.24

ACCOUNTS PAYABLE

LESHER LUMBER & SUPPLY CO., Dr.

TO

Pa RR Co

Folio	DISTRIBUTION
<i>P</i>	<i>Exp. Equip</i>
	151.24

Fig. 4b. Top of left hand half of back of voucher. Right half for endorsements, with printed legend, "Endorsed and receipted as payment in full for account as herein noted."

well to provide an extra column here for cash and put cash sales here instead of on the daybook as described, carrying the column totals only to the cashbook, thus having all sales together. The third prize article, which will be published next, describes a system in which the consecutive sales ticket duplicates constitute the salesbook, doing away entirely with the labor of rewriting.

The contract salesbook is a strong feature of this system. The contributions describe widely different methods of handling contract or estimate sales. Some charge the entire price up at once before delivery. Others charge each load at full price, and attempt to collect full price if the customer does not carry out his contract in full; while if he does, the last loads are priced at a reduction sufficient to make the total charges agree with the estimate. Others price the loads at pro rata of the estimate price. This system appears to be the only one in which the entire transaction is held in suspense upon a separate record until completed, and then put upon the regular books in a single entry, including extras. It will be noted that the so-called contract journal has no money columns and keeps track only of quantities. When completed the special statement form, Fig. 3, is used to figure up on. The estimate items and over and under-deliveries on these items are first figured, then the extras, grouped into departments. It happened that in the example given the original estimate only included lumber. Presumably if hardware and building supplies had been included these would have been grouped together to afford a convenient recapitulation. In the lumber extras the individual items are carried direct to the charge column. The building supply and hardware items are itemized in the first columns and totals carried to the charge. These items theoretically should have been set in the second or de-

Wk Ending	2 x 4	Hem	2 x 6	1 x 8
Jan 9, 10	8	9	10	12
Mon 22	11	56	16	29
Tue				
Wed	21			180
Thu	36	14		98
Fri	48	10		175
Sat	12			16
Total	70	36	54	70
	10	12	14	16
Mon	10		25	
Tue	11		9	
Wed		54		45
Thu		6	11	12
Fri		10		52
Sat				12
Total	11	60	35	20

Fig. 7. One corner of weekly stock sheet holding 420 items, size not stated. Totals post to stock cards.

Items	On Hand	Obligated	Surplus	Over Sold
Item 2x4x8	217	120	97	
9	183	95	88	
10	429	116	313	
12	311	165	46	
14	109	134		25
16	375	210	165	
18	513	322	191	
20	424	114	310	
22	152		152	
W.P. #2 7/8x4"	1718	526	119	
Item 2x6	10	54	60	6
12	79	72	7	
14	113	68	45	

Fig. 8. Corner of periodical stock summary sheet as described in text. Size of sheet not stated.

livery column, as these are not parts of the original estimate.

The stock record system described shows more complete results than any other which has been submitted, in that it takes into account material sold on estimate but not yet delivered. It uses both a stock sheet and stock card, the latter for the ultimate record. The stock sheet is merely a recapitulation which accumulates the week's sales for posting to each stock card in a single item. This looks like extra work, and in other systems the items go to the stock card direct; but a little examination of Fig. 7 will show that items can be placed on this sheet more rapidly than by sorting out a card, entering and replacing for each item, so any criticism on this score appears to have a pretty stout string tied to it. The resumary, Fig. 8, however, can not escape such criticism so easily. The on-hand balances already are shown on the stock cards. By providing an extra column they could take the statement of "Obligated" or sold for future delivery, indicating at once the few cases needing attention and purchase; and these few could then be taken off in a very brief statement omitting the majority of items which needed no particular attention at that time.

The contributor, having provided special books for voucher distribution and for charge sales, covering the great majority of transactions, is content to use daybook, cashbook and journal of commonplace form for petty cash and the few transactions which require journal entry; making these first on a daybook (possibly in pencil) merely to contribute to neatness of the journal. The latter presumably is 2-column, requiring separate posting for each item, and the ledger accounts are relied upon to accumulate and show the results of business. It is believed, however, that if he would arrange a synoptic or columnar journal in such manner that it would itself constitute a running balance sheet of the business it would be a valuable addition to the system. The objection to a multi-column journal occurs where it is used for expanded instead of condensed entries, filling up fast and multiplying the work of totaling columns forward to a new page. Its advantage, in addition to constantly showing accumulated operating results, is that each column proves against its corresponding portion of the ledger, thus sectionalizing and quickly locating any trial balance errors, obviating the necessity of checking over the entire trial balance—that most despised of all bookkeeping tasks.

However, while the contributor received a low score on cash and journal system, his method of handling purchases and disbursements, stock records, expense classifications and the difficulties introduced by special contract sales, carried him easily into second place, and these features of his article are heartily commended.

Bookless Bookkeeping—Salesbook and Petty Cashbook Replaced by Ticket Systems—Monthly Statements Written Progressively—A Clever Synoptic Journal Scheme.

THIRD PRIZE LETTER.

TERRE HAUTE, IND., Nov. 21, 1910.—Editors AMERICAN LUMBERMAN: I wish to enter the enclosed forms in your bookkeeping contest.

We use no books with this set, except the ledger or ledgers; and the set is made up of the order and loading ticket as per Fig. 1; the triplicate delivery ticket and invoice as per Fig. 2; the statement and ledger as per Fig. 3, the cash ticket, Fig. 4, and ledger.

When the order is received it is immediately entered upon the loading ticket and is given an order number, and all loading information is mentioned thereon and at the end of the month these tickets are sorted in rotation for future

reference and made into one package and the month noted on the face.

From the loading ticket, each load being made upon a separate delivery ticket, we make the delivery and invoice tickets—ticket No. 1 remains in the office, being the original copy, and is used to make the charge; ticket No. 2 goes to the customer and No. 3 is signed by the customer and returned to the office, where it is filed on a post binder in number rotation. The charges from No. 1 are posted in rotation and it is also filed on a post binder and if not enough to fill the binder for one month, we place a divider between the months on the binder and mark them so as to show on the side.

These loading tickets and delivery tickets are used in single orders as well as for contracts, as we charge everything as soon as it is delivered, whether by contract or otherwise.

So far this system gives everyone an invoice for the amount received, and we find, after having used it for some time, that the customers save their invoices and use them for settlement and quite frequently the amounts are paid upon delivery to the driver, which saves the book work, as those paid are so marked upon the No. 1 ticket and no further entry is made of them, except "cash sale."

We now open the statement ledger and the statements are also given numbers and filed on the post binder in rotation. To do this successfully we make a temporary index, using heavy paper or cardboard, dividing the different letters in sections large enough to handle the month's business, as we do not post the amounts of the statement ledger until the end of the month, at which time the amounts are totaled and entered in the ledger as a total under the last date in which material was bought for that month. In the event of two ledgers, it will be necessary to make two index sheets (one from A to L and the other M to Z) and have the statements to correspond. The statements are put up fifty to a pad and one pad will be numbered in duplicate throughout and used for the first ledger and the other for the second, as in this manner we do not have to change ledgers in posting but will post all the accounts in pad No. 1 into ledger A-L and pad No. 2 in ledger M-Z. After the first or second month, one will become familiar with the amount of business done and will only number in advance about the amount of statements required. One ledger need not be treated in this manner, as the statements can be posted as they are entered without changing ledgers.

We use an autograph machine for invoices, making the tickets in triplicate and the statements are made in duplicate, so that all the work that we have done would be necessary in any kind of books, but we have furnished our customer with an invoice at the one writing and at the end of the month we have our duplicate statement ready to mail or send out with the collector without any extra work.

We use the looseleaf ledgers and recommend them above all others and the form enclosed is the one used after sev-

Form A

Order No. *2* - Terre Haute, Ind. *Nov 15 1910*

The REESE-SNIDER LUMBER CO.

Deliver to *Mary Doe*

1920 S 5th St

Loaded by *Val M*

Driver *Frank C*

PIECES	SIZE	LENGTH	FEET	AMOUNT
<i>✓</i>	<i>2x6</i>	<i>18</i>	<i>36</i>	<i>glazed x 350</i>
<i>✓</i>	<i>2x6</i>	<i>18</i>	<i>36</i>	<i>" 4 panels x 225</i>
<i>✓</i>	<i>2x6</i>	<i>18</i>	<i>36</i>	<i>windows 2 lbs 24 x 32 - 88 SS x 300</i>
<i>✓</i>	<i>8x6</i>	<i>10</i>	<i>80</i>	<i>Round edge casing x 200</i>
				<i>1075</i>

Filed NOV 15 1910

Fig. 1. Loading order. Manila tag, 4 3/4x7 long. "X" marks indicate that these amounts have been invoiced.

ernl trials of different stock forms; our balances are carried out after each transaction so that we have no footing lines to make in order to take off the balances for trial balance, and one is less liable to make error in handling one transaction than several during the month.

Our cash system is very simple. We use an autograph machine that makes the original ticket, duplicate, and the triplicate copy remains in the machine—this triplicate copy rolls on a spool and the entries are spaced about three-fourths of an inch apart, so that they are easily added and the record on the triplicate is that part shown on the bottom of the sample. The right hand column are "Sales" and the next to the left is "Received on Account," and the one on the left "Paid Out." The other columns are for the ticket numbers and the operator's initial.

In posting to the individual accounts we use the duplicate ticket (the original is given to the customer) and post the amount shown and also place the amount on a separate sheet of paper in order to see that the amounts posted will equal the amount shown on the footing of the triplicate sheet. If they do not, we find the reason and in this manner we keep a check on each day's posting. The cash tickets are numbered and filed in rotation and are the only cash book used.

In posting to the ledger we use in the "folio" column by

letter and number instead of page number, for example: When posting a charge we place the letter "S" before the statement number, indicating "statement No.," and in posting the cash ticket we place the letter "C" before the number, indicating the cash ticket number and these can be referred to quickly, as they are filed in rotation.

The ledger shows the statement number, the statement shows the ticket number, the ticket shows the order number and the order will show the full information. However, it is very seldom that we have to go farther than the ticket (or invoice). In this manner we keep the accounts of our contractors all under one head, but the statements show the different "jobs" and are entered in the ledger accordingly. Should we desire to trace any particular job, we have only to look in the ledger and find the statement covering that job and that statement will show every delivery for each month. We find that the contractors keep their invoices and in this manner they keep in touch with their different contracts and when the statements are sent at the end of the month they are checked over and settlements are made much more intelligently than under former methods.

When the month's business is closed, the statements are footed and the amounts listed; this will show the total sales on account and will be added to the individual ledger

balance for the month just passed and from this amount we subtract the total amount as shown under cash ticket "On account" for the month, and the balance will show the total of the individual ledger (or ledgers). I find this method a great labor saver, because, after having posted the statements to the ledger and I take off the balances (which are already carried out) and they agree with the amount as shown in the foregoing, then I am certain that my ledger is correct and trial balance worry is soon over. However, if it will not agree we know where the trouble is before we leave it. The total amount of the statements is credited to the merchandise account and this, together with the total of the cash sales, will equal the total sales for the month.

In connection with the above, I use a combination journal, cash-book and check register. This is a multi-column book, the left side Dr. and the right Cr., and on each side of the binding is the blank space for name of account charged or name of account credited, and each column is headed with the name of the account, namely, debit and credit columns for lumber account, accounts payable, notes payable, notes receivable, cash, bank, interest, customers' ledger, and debit column for expense and freight; we also leave one or two blank columns for items that may be involved later and the names can be written at the head.

1										STATISTICAL JOURNAL, CASH BOOK AND											
DEBIT										REVISED BY G. M. TESSMAN											
GUIDE	DEBIT	DEBIT	PURCHASE ACCOUNT			FREIGHT			EXPENSE	INTEREST & DISCOUNT	✓	ACCOUNTS PAYABLE	CUSTOMER'S LEDGER		BANK	✓	CASH	GENERAL	FOLIO	NAME OF ACCOUNT CHARGED	DATE
			CAR	NO	AMOUNT	CAR	NO	AMOUNT					FOLIO	AMOUNT							
0															1275000	65000	17500	3750000			March
1			2C	57931	34750																" 1
2						2C	57931	10250													" 1
3									19800												1
4										1500											1
5											✓	35000									Next Boat Lbr Co 1/5
6													240	✓	25000						Johnson
7																✓	80000				1
8																		8500	250	Bldg Co	1
9																81500				Int Nat	1
10																	✓	10000			1
11											✓	34750									The Boat Mtr Co 1/5
12																					1
13																					
14															975000						31
15																					

Fig. 5. Journal form occupying two facing pages, each about 18 inches wide by any

Postings are made as follows: Material bought—Charge lumber account on left hand page and credit Accounts Payable on right hand page. Money borrowed on note—Notes payable credited and cash or bank charged. Note received on account—Notes received charged and customers' ledger credited. Cash—Cash received per triplicate in machine; cash is charged with footing and lumber account credited with the amount of sales and customers' ledger with amount "on account" etc. At the end of the month enter the total of the statements to the debtor account of customers' ledger column and from this subtract the total shown on credit side of the same account and the balance will give you what your individual ledgers will total and so it will be with each account that is carried in the combination book. This is really a perpetual trial balance and is a guide for all the separate accounts and the amounts shown therein (if properly entered) and will be the basis for the individual accounts to come to and if the trial balance is "off" we have only to look into the combination journal to see in which department our trouble is.

Regarding stock book, I have had considerable experience and have yet to find one that is accurate, or, in other words, to find everyone about the place that will do their part in keeping an accurate account. Quite frequently our billing calls for a certain number of pieces when the

order is filled "lineal feet" and this, together with cash sales and items not properly recorded and other changes and corrections made by the loaders will throw the stock book off. The one that pleases me better than any other is a multi-column book (twenty to twenty-four to the double page) with about six or eight cut leaves between every full page and the items listed down the left column, and each small column represented the sales for one day and dated at the head and at the end of every week we make the additions and deductions and carry the balance on hand into the seventh column. Sales are entered in black and purchases in red. It is optional with the bookkeeper whether the items are carried in feet or pieces. The book can be made to order and enough cut leaves left to handle six months' or one year's business without transferring the original entry at the left.

GUS H. TESSMAN,

Bookkeeper for The Reese-Snyder Lumber Company.

In a separate place Mr. Tessman explains the journal further, as follows:

This book at first glance no doubt will be confusing to one not accustomed to its uses, but after it has been installed and in good running order we would not part with it; while the entries are made across the page they are really read vertically and by this method we keep the various accounts separate and "in balance." In the sample

will be found balances at the head of the different columns carried forward and the debit side will be found to balance with the credit side of the journal. At the end of the month I add the several columns and in the ones that I do not post to the ledger accounts I simply subtract the smaller from the greater and carry the balance over to the beginning of the next month. However, during the posting of the current month I add the columns, and if the aldes balance I carry the totals forward until the end of the month and proceed as above.

In the amount shown under the head of "General," on the debit side will be carried such accounts as will not be handled in your every day transactions and in this case it has been the idea of your writer to make this account up of the following items:

General Dr.

Notes receivable	\$ 1,500.00
Real estate	5,000.00
Buildings, furniture, wagons etc.....	850.00
Inventory	30,000.00
Interest and discount.....	150.00

\$37,500.00

CHECK REGISTER FOR THE MONTH OF <u>March</u> 19 <u>10</u>															CREDIT				
GUIDE	TRANSACTION EXPLAINED	NAME OF ACCOUNT CREDITED	FOLIO	GENERAL	CASH	BANK		CUSTOMER'S LEDGER		ACCOUNTS PAYABLE		INTEREST & DISCOUNT	SALES ACCOUNT	CREDIT	GUIDE				
						CHECK NO.	AMOUNT	FOLIO	AMOUNT	DATE PAID	CHECK NO.	AMOUNT							
0	AMOUNTS FORWARD																		
1	Car 184 Not Com. Ftg	The Best Lbr Co. 3/6		✓	1792.50							3150.00						0	
2	Fit above car 20.					750	102.50			Mar 1	754	347.50						1	
3	Labor per time book			✓	198.00														2
4	1000 ⁰⁰ Note Received 2 days 1/2			✓	15.00														3
5	Invoice Car 184	Dft				751	350.00												4
6	Cash advanced to Smith 10					752	250.00												5
7	See Cash Book P49 or see Smith tickets this date						85.00	✓	8/8.00				22.00						6
8	Bot Wagon					753													7
9	See Carbon copy						81.5												8
10	W ^m Budd part payment	Notes Receivable	11/100		100.00														9
11	Less Dis. 2% Dft					754	340.55						695						10
12																			11
13																			12
14	% Ported to Ledger from statement footings													9750.00					13
15																			14

convenient length, fifty lines suggested. Folio 114 would refer to journal page 1, line 14.

General Cr.

Capital\$25,000.00
 Merchandise credit
 balance..... 13,425.00
 Notes payable..... 5,500.00
 Undivided profits.. 4,000.00

\$47,925.00

It will be noted that I have entered the totals of the interest account into the general account from the preceding month by a red ink footing, which closes both sides of this account and from the general account it is entered into the ledger account of that name. We must transfer each account that is closed at the end of the month to the general account first and post from this account, as it is the idea to have the journal in balance with itself and make the other books or accounts "come to it." The same thing, it will be noted, has been done with the merchandise account. However, this procedure is optional with the bookkeeper, as it will make no difference with the result as to whether the balance is transferred to the general account or whether it be subtracted at the end of the month and the balance carried forward in its proper column.

In entering purchase account, the freight is deducted (where delivery is allowed) and the net balance is entered to the debtor side, and the accounts payable are credited as per lines 1 and 2. At the end of the month we add the Freight and Purchase account together and the footings of the two will make the total to be charged to the merchandise account. Local shipments are marked "local" where the car and number are named. The expense and interest columns are self-explanatory. Accounts payable must be entered the amount of the invoice or debt that was placed on the credit side so that the exact amount shown will be the proper balance in Accounts Payable. If interest be added to the invoice for past time, it will be entered into the column under that head and discount will be treated as shown on line 11. Cash will be handled as per previous explanation, or a cashbook may be opened with three columns on each side of the page and each column will represent receipts or expenditures and the total will be charged

—NOTICE—
 Our terms are NET CASH. All bills are due on delivery of material. It is no expense to us to have a man for the purpose of collecting and is very annoying to you to have him call at your house. Therefore we ask you to call on our salesmen for all orders to come. Yours truly, The Reese-Snyder Lumber Co.

Form B		53 The Reese-Snyder Lumber Co.		Ticket No 14300			
Both 'Phone		539 North Seventh St., Terre Haute, Ind.		Nov 15 1910			
Delivered to		Mary Doe		Order No. 2			
1920		P. 5th St		Ordered by Phone			
Loaded by		Val M		Forwarded to Warehouse No. 1			
Teamster		Frank C					
No.	Item	Size	Length	Feet	DESCRIPTION	PRICE	AMOUNT
1	Door	2 1/2 x 6	18		glazed		3.50
2	"	"	"		4 panel		2.25
3	Windows	2 1/2 x 3 1/2	18		ch. glass		3.00
4	8 x 6	10	40		Round Edge casing	50c	2.00
							10.75
Remarks:							ORIGINAL 1
KEEP THIS TICKET							CUSTOMER'S TICKET 2
You will need it to check up your statement This is the Only Itemized Bill you will receive							
Received the above material Sign here: Mary Doe							DELIVERY TICKET 3

Fig. 2. Sales ticket, triplicate. Size 7 1/4 x 9 wide, including post binder margin on first and third tickets. Holes punched for binder do not show in cut.

to cash and the credit side of the journal will be entered the separate amount for which it is intended. In the event that a cash book is used in place of the cash tickets, the posting "Received on Account" will be posted to the customers' ledger direct from the cashbook and the total postings will be checked from the entry as shown on line 7.

We find after the several postings into the journal that the additions of the several columns will balance and the footings will amount to \$61,275.50. If it does not balance we must find it before we can carry the amounts forward to the next page and in this manner we keep ourselves in check. In taking off the trial balance our journal is the guide, as it will show what the trial balance must be, and we bring the different amounts to the amounts shown in the footings. Referring back to the statements at the end of the month we total the amount of each statement and the total of the footings thus found will be entered as a whole to the customers' ledger on the debtor side as shown on line 14, and the sales column will be credited with the same amount.

At the end of the month we add the debit side of customers' ledger and from it subtract the credit side (from entries made as explained) and the balance shows what the footings of the ledger must be, so that in this manner we know what the trial balance is before we take it, only that we make the accounts "come to" the amounts shown in the register and by this method we know in just what department our balance is off, if such be the case.

In making deposits in the bank, I make a carbon copy of the amounts and on this copy, that I retain, I make memorandum of what the items are, and the checks will show "by whom made" and "from whom received," so that I can refer back to the date for information.

DISCUSSION.

The ledger page submitted is not reproduced, as it is a familiar form, in which the narrow explanation column is followed by the folio column and three money columns, the first for debits, second for credits and third for balance. Sometimes next the balance column a narrow column is allowed in which to indicate whether the balance is debtor or creditor. This is not shown on the form submitted, and is unnecessary as credit balances may be indicated by a star or by underlining. The explanation column is very narrow, as no explanations are used or only brief ones, such as "C" for cash, "A1" for allowances etc. The rulings therefore occupy only half the width of the page and are repeated for the second half, into which the account is forwarded when the first half is filled.

The methods of handling sales tickets and cash tickets is unique and deserves careful attention. A triplicate plain roll in the cash machine summarizes the tickets issued in a single line for each transaction, convenient for adding. The contributor implies that the sales tickets are totaled forward in a similar manner which he does not fully describe, but which might well be accomplished in the same manner as with cash, by a fourth or summary roll separating cash from charge sales.

The contributor refers to his collection of current month's statements, with their duplicates interleaved, alphabetically arranged, as a "statement journal." This has been edited to read "statement ledger," as it is usually so known and is really a ledger of current accounts, carrying the charges until they are transferred to the regular account at the end of the month. Mr. Tessman probably will recognize that an improvement could be made here by the use of a special "customers' ledger" in which the left-hand page would be the regular standing ledger account of the customer, and the right-hand page would be his current monthly statement with its duplicate beneath it, ready to receive the daily postings. This, of course, would be loose leaf, new statement blanks inserted monthly, and old statement duplicates held in it till settled and

then transferred, and would have a permanent alphabetical index, like any loose leaf ledger.

The method of handling deliveries on contract sales is suggested but not fully described, and is not so complete as that described by Mr. Leshar in the last article. In the present instance deliveries are invoiced as they occur, while Mr. Leshar accumulated the information on the page in the special loose leaf contract journal, until deliveries were completed, and then made one statement and charge entry covering the entire job. Whichever way is adopted is a matter of preference.

The columnar journal plan here presented is fairly well worked out, and while as the contributor says it is not readily comprehended at first glance he is at considerable pains thoroughly to explain its uses. It is chiefly an intermediate book between the original entry records and the ledger, taking cash and sales transactions in condensed form and carrying these entries as a checking balance against the postings from original tickets, while as to other transactions it is a book of original entry. He indicates the great advantage of such a journal in sectionalizing the ledger. Each column controls its own ledger account or set of accounts and shows or should show the same balance. Any difference is to be hunted for only in that section of the accounts instead of looking through the whole trial balance. The reviewer prefers the journal form in which each account has its own pair of columns, Dr. and Cr., located together, instead of being separated to the right and left sides of the facing pages. This is a stock form, and the columns of Mr. Tessman's form may be provided for, or any number of columns greater or lesser.

Mr. Tessman recommends for a stock record the line-ledger form in which each item is carried forward on its own line through successive short pages, so that one writing of the stock items will carry for a long time. This is a good arrangement but not so flexible as the card system, a separate card for each item, which Mr. Leshar has already described, and the most complete development of which will soon be published in one of the many valuable contributions yet to appear.

The work of charging and billing, and the handling of petty cash, constitutes by far the largest volume of the transactions in almost any lumber yard, and Mr. Tessman appears to accomplish it very successfully with the least amount of labor of any plan submitted, and it is the strong feature of his contribution. Just how it would add anything whatever to his records to go to work and write up all these transactions in a sales journal, post to accounts by items and then make the monthly statement from the ledger account at the end of the month (instead of posting direct from sales ticket to statement as he describes) is not apparent;

and if the work accomplishes no useful result, why is it being done every day in hundreds of lumber yards throughout the country?

Form C-1000
MONTHLY STATEMENT
No. 1
Date 1/15/20
M. Mary Doe
Terre Haute, Ind. November 1912
BY ACCOUNT WITH
The Reese-Snyder Lumber Co.
539 NORTH SEVENTH STREET
TERRE HAUTE, IND.
DATE 1/15/20
EXPLANATION
CREDIT AMOUNT
DEBIT AMOUNT
1075

Fig. 3. Top of monthly statement, size 7 1/2 x 8 1/2. Explanation left blank except in special instances, such as footings and credits.

CASH TRANSACTION WITH
The Reese-Snyder Lumber Co.
DEALERS
Lumber and Building Material
11362 539 N. Seventh Street
Terre Haute, Ind. Nov 18 1910
Mr. John Doe
Address Small Job 1010-N-10

Cr By Check
#171 On a/c 75.00

If Our Dealings Please You, Tell Your Friends: if not, Tell Us.

Paid Out	Number	Operator	On Account	Cash Sale
	11362	J	75	-

Fig. 4. Cash ticket, 3x4 long. Issued from machine, with summary roll taking only the bottom entries in three-fourths inch spacing for totaling in three separate classifications.

Good Brief Classification of Accounts—Tissue Ticket Duplicated Pasted Into Salesbook—Invoices Made and Mailed After Orders Are Filled—Books Closed Monthly—Card Index Stock Record.

FOURTH PRIZE LETTER.

COLLINS, MISS., Jan. 12, 1911.—Editors AMERICAN LUMBERMAN: Bookkeeping can be briefly defined as the art of recording business transactions in the terms of money and showing the results obtained therefrom. If the results shown are to be accurate it is absolutely necessary to record all the transactions. In conducting a retail yard all the transactions must be gotten into the record before the results shown can be relied on as accurate.

The expenditures in connection with conducting such a business, outside of the purchase of the stock in trade, can be classed under two heads—permanent [investment] and operating expense. Under the former should be included real estate, buildings, machinery, office equipment, horses and wagons, in fact all permanent property. All other expenditure is to be classed under operating expense. All property should be represented by corresponding accounts on the ledger. Nothing should be charged to these accounts except property or equipment purchased or permanent improvements made. All repairs and upkeep are a proper charge to operating expense. For purposes of analysis it is better to keep various expense accounts, the number depending entirely on the size of the business or the choice or reference of the individual.

Under the following general heads can be grouped all the expense: Repairs and maintenance, depreciation, labor, office expense and salaries, general expense, insurance, taxes, rent, interest and discount. Of course, many of these can be further subdivided if desired. An account should be kept for the stock in trade, perhaps several, depending on the number of side lines carried. One of these should be headed lumber and one or more for coal, cement, paint or whatever else is sold.

The simplest cash book to keep is a columnar combination cash book and journal. One as shown in Fig. 1 will serve for the purpose of illustration.

Items for which columns are not provided must be entered in the sundries columns and posted direct to their respective accounts. Footings of the several columns are carried forward until the end of the month and the totals posted. Of course, all the separate items in the sundries columns must be posted. This book is also used for the recording and distribution of all invoices rendered the concern as well as for the regular journal entries. Where the size of the business warrants, of course, a regular purchase invoice book could be kept. This cashbook is self-

balancing and all entries are posted to the same side of the ledger account, which makes for simplicity.

A petty cashbook should be kept in which should be entered all receipts from cash sales and all petty expenditures from day to day. These are totaled at the end of the month and transferred to the large cashbook as shown above.

Provide a triplicate ticket machine. Make out a ticket for all material leaving the yard; this includes all local cash values as well as material going out by team. The original and second copies go with the driver, the original to be signed by the customer and returned to the office, the second copy to be retained by the customer. At the end of the day the roll of third copies are removed from the machine, clipped apart, and pasted in order in the sales book, priced and extended. Of course, this last can be done either before or after the tickets are put in the book. Invoices are made out direct from these tickets. The signed ticket which comes back is filed under the customer's name. The salesbook should be ruled with two or more money columns to the right. First should be headed Lumber, second Cash Sales, and the third or others Coal, Lime, Cement or other merchandise. Total amount of the charge lumber sales of each ticket should be entered in the lumber column, all cash sales in the second and the charge sales of other merchandise in the third. The totals of the charge columns are posted at the end of the month to the credit side of the proper account in the ledger while the individual accounts are debited. The cash sales column is not posted, as this total is taken care of through the petty cash. If cash sales is for coal or lumber it should be so indicated

when the entry is made in the petty cash as shown above. At the end of the month the total of these two should equal the total of the cash sales column in the sales book. Of course the petty cash sales totals should be posted to the lumber and coal accounts respectively.

All house bills or contracts are handled as follows: For each contract open a special ledger account with the purchaser and give it a number or name. All tickets for deliveries to this job are extended in the sales book at about the price figured in the estimate and are posted to this special account in the ledger. When it comes toward the finish of the job it must be seen that the final delivery is sufficiently priced to equal the amount of the contract exactly. All money received from the customer applying on this contract should be credited to him on this account. Then when the account is settled in full the sheet is balanced and transferred to the closed accounts. The looseleaf ledger will be found to be far the most convenient, once a man has become accustomed to it. For all contracts, too, a folder should be opened in the letter file and all papers pertaining to it filed there. When the job is finished the folder is transferred. Under this system there is little trouble in keeping exact tabs on the status of each of the various contracts.

The dealer who is not satisfied with taking an inventory only once a year and who desires to be accurately posted at all times on the amount of stock on hand can do so readily by keeping a card file inventory. A card should be given to one or more items and all receipts and sales recorded thereon. These should be ruled off at the end of each month and the balance brought forward. It takes

time and pains to keep up such a record but the many benefits derived from having this information on tap at all times will amply repay the additional effort or expense. Where such records are kept accurately it permits of the books being closed each month and there is not the uncertainty attendant upon going a whole year without knowing accurately how the business stands. Fig. 2 will serve as an illustration of how the continuous inventory may be kept.

At the end of the month it must be seen before closing the cash book that all invoices rendered the concern are entered and that all salaries are properly credited. The proprietor or proprietors should also credit their accounts with a reasonable salary. Further it might not be a bad idea for the proprietor to credit his account with interest at 5 percent on the amount of his investment in the business. This must be left to individual preference, however. Any accounts known to be dead should be charged off. After the books have been written up it will be an easy matter to determine the total expenses for the month. Find the total sales of all kinds and divide the total expense by this amount and it can be easily found what percentage of the sales it is costing to conduct the business. Right here, however, it is easy to drop into error as follows: Supposing it has cost 20 percent to run the business, stock has been bought at \$30 and it is necessary to find the price at which it must be sold to realize 10 percent profit. It is often figured as follows: Cost \$30, plus 20 percent expense \$6, plus 10 percent profit \$3, equals \$39, the price at which it is to be sold. Figure back a minute and see how near this is to the truth: \$39, less 20 percent expense \$7.80, leaves \$31.20, or a profit of \$1.20, which is about 3 percent on

CASH BOOK AND JOURNAL												CASH BOOK AND JOURNAL					
CASH	OFFICE EXP.	GEN. EXP.	LABOR	COAL	LUMBER	ALLOW.	INT. DISC.	BANK	SUND.	FOL.	DATE	October, 1910	FOL.	SUND.	BANK	INT. DISC.	CASH
						10.00	28.00	700.00			1910	TOTALS FORWARD		586.00	150.00	2.00	
					396.28						10/2	Bar Harbor Saw Mill Co		396.28			
				149.00							10/2	Southern Coal Co		149.00			
								396.28			10/2	Bar Harbor Saw Mill Co			388.35	7.93	
							7.00	143.00			10/5	Cash Sales Lumber		300.00			
												Coal		25.00			
												" Cement		200.00			
525.00	147.00	135.00	406.00	149.00	396.28	18.00	40.00	1663.00	546.28					2419.28	938.35	9.93	458.00

Fig. 1—Columnar Cashbook and Journal. Sketch sent does not indicate size.

At the end of the fiscal year to determine the result of the year's operations, bring the books up to date, being careful to see that all obligations incurred are entered and that a reasonable amount has been charged off for depreciation. Having the amount of stock on hand of lumber and merchandise deduct each amount from the total debits of the respective merchandise accounts. The difference will in each case indicate the cost value of goods sold during the year. Now determine the total amount of expense for the year and the total sales. Find the ratio of the various sales accounts to the total sales and apportion that amount of the expense to each account. Now make the closing entries, closing out all the expense accounts and charging the apportioned amounts to the respective accounts as indicated above. The credit balance in each account will indicate the profit made in that department during the year. Rule off, transferring the several balances to the credit side of the profit and loss account, bring down to the debit side the amount of the inventory and the books are ready for the start of another year.

JAMES B. HUNT.

In this article there is an excellent handling and arrangement of accounts, in books and forms which in themselves offer no particularly novel features. The machine sales ticket system is almost exactly that described in Mr. Tessman's article last published; but there the duplicate tickets, assembled in numerical order, formed the salesbook, while here the tissue triplicate is pasted into a book and extended into columns. The machine ticket appears to be a memorandum only, followed later by a regular invoice. This is ordinary commercial practice, but in lumber it is usually considered practicable to price and extend the original sales ticket and make it serve as an invoice also, saving labor and postage. Where there are many differences between quantities ordered and actually delivered follow-invoicing is the better plan; but in lumber yard practice the man writing the order usually knows whether it can be filled or not, and any short items can be taken care of by no-charge-back order or by credit memorandum, with less labor than would be involved in follow-invoicing every sale.

separately distributed to the several merchandise accounts. There is no reason why the salesbook should not provide columnar distribution to merchandise for cash sales as well as charge sales, except that possibly they are fewer. This would involve, if merchandise is divided into three classes, say, lumber, coal and building material, six columns, a cash and a charge column for each kind. Another arrangement would provide two columns for cash and charge debits, and one credit column for each of the merchandise classes, or five in all, but would involve double entry of each item amount, once in the charge or cash column as a debit, and again in the proper merchandise column as a credit. Where four or five or more merchandise classifications are desired this is the better plan.

collections, including advertising etc., with another proportion of overhead expense (which totally absorbs it), and the result is the final delivered cost with all expenses distributed upon it; and if it is desired to make 10 percent upon the sales price it must be so fixed that the final cost is 90 percent of the selling price, as the contributor has illustrated.

The handling of petty cash account separate from the main cash account is largely in line with the third prize article, except that it was kept there by machine cash tickets, which took the place of a cashbook.

The method of keeping stock account by card system, a separate card for each item (several lengths on one card) has been recommended by previously published contributions. It is believed that the form here submitted would be improved by providing three contiguous columns for each item, one for receipts, one for sales and one for running balance. The balance would be extended only as the information is required, but it is often desirable to ascertain this as to any certain item at other times than at the periodical balancing indicated in Fig. 2. One column for date and one for car number at the left would answer for all the columns across the card, and both material received and material sent out on any date would go in their respective columns on the one line. The most complete stock system contributed remains to be published.

In the estimate plan described, deliveries are invoiced as made at approximately pro rata prices, keeping the books in substantial line with the transactions, and on the clos-

ing deliveries on the estimate the charge is so adjusted as to close out the estimate at the agreed aggregate price. Some such plan is generally followed, though one contributor not yet given his turn at publication adopts the theory that the customer has not earned the estimate reduction until he has filled his contract by taking all the material, and current deliveries are priced at full price, and the allowance adjustment credit is made only at the close. This appears to be good practice, and the contract as a matter of justice should provide that if the customer does not fulfil his agreement to purchase the entire bill that portion actually delivered shall be settled for at the usual price. The reviewer believes that the contract itself should bill all the material at regular price, and then state a specific sum which is to be allowed by way of reduction, to which the customer shall become entitled when he has completed his contract. Often item prices are not extended on such estimates as given the customer; but even in these cases the total given should be the current price total, with the special reduction to be allowed separately stated.

Mr. Hunt submits a sample of ledger page, which can be described in smaller space than would be required to illustrate it. There is a balance column down the center separating the two halves of the page. The left or debit side is the conventional form; so also is the right or credit side, except that the money column is moved from the right over to the left of the date and explanation, so that it comes next the balance column. In other words, there are three money columns in the center, debits, balance and credits. The form carries a sample of handling merchandise account, in which Mr. Hunt subtracts the inventory from debits instead of adding it to the credits, in balancing forward; the purpose of which may need a word of explanation. Merchandise account as usually carried represents really two accounts, Buying and Selling, and often two accounts are used. If but one account is used the debit side represents inventory balance and purchases, at cost, and the credit side represents total sales, at selling price. But in buying there are often credits, as for allowances on claims; and in selling often there are debits, for merchandise returned and for allowances on complaints. In order to keep the two functions of the two sides of the account separate, buying credits should be subtracted from the debit side, and in closing, the inventory should also be subtracted from it; and merchandise debits should be subtracted from the credit or selling side as a deduction from total sales; otherwise the account would represent a greater amount of merchandise bought and sold than has actually been the case.

In the third prize article, last published, it was announced that the billing and charging system there described was of a high order of merit. Briefly comparing with the present one, the former first wrote the order on a yard-order card and, when filled, invoiced in

triplicate, using one numerical set as the sales record, with no bound salesbook. This one makes the original a triplicate memo, pastes the triplicate in a salesbook, prices, extends and makes a pen invoice. Thus far labor is about even, with two writings, though it takes some extra time also to paste up the tissues; from there the plans vary. Mr. Tessman posts to the monthly statement and at the end of the month posts the current total of statement to ledger account and carries the ledger balance to the statement, completing it for mailing. Mr. Hunt follows the old routine, posting to ledger and making the statement at the end of the month.

There is always the question in a bookkeeping system as to how far the records may profitably be simplified as a labor-saving expedient; and this question is largely in how far the details of the transaction may be left to the original entry and in how far they need to be carried forward with the posting of the net results. To get at the original information Mr. Tessman has to go back through statement and invoice and order numbers to the original yard order. Mr. Hunt has only to go from the ledger account to the sales book page in which the original entry tissue is pasted. His plan takes less time in reference, when reference is needed. It takes more time to make the record, including the ledger and monthly statement. The question therefore is: "How often is it really necessary to look up the original entry?" The answer to that question determines in how far it is desirable to save reference time in a certain proportion of transactions where reference is necessary, by expending extra recording time on every transaction.

Practical Methods that Simplify Diversified Accounts—Feature that Aids Collection—Up-to-the-Minute Systems Illustrated—Conveniences in Book Form—Handy References That Are Immediately Available.

FOURTH PRIZE ARTICLE NUMBER TWO.

In describing the methods of accounting used by the writer it is assumed that a new set of books is to be opened by a new company in the retail lumber field. Someone must be employed to keep the books of the concern who understands the common methods of bookkeeping. He must select his own books. The writer offers his assistance in selection of them.

The simplest yet most accurate and best set of books to open up are a ledger, combined cashbook and journal (hereafter referred to as journal), daybook and billbook, a credit memorandum book, an estimate book, stock-on-hand book

and order book. These books are to be supplemented by a sale ticket book on the person of everyone connected with the selling of material handled in yard.

The ledger should be a looseleaf book. A statement of the actual assets and liabilities of each member of the firm is made and is entered under stock account of each. Then open a merchandise, machinery, coal, miscellaneous, buildings and fixtures, bills receivable, bills payable, expense, freight and express, salaries, insurance, interest, collections and exchange, advertising, lost accounts and notes, loss and gain and taxes accounts.

These accounts are open and entered in journal with rulings shown, a separate entry for each member of firm for amount invested in miscellaneous column to right of

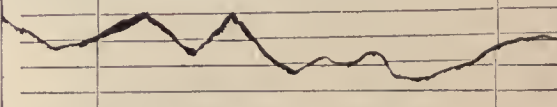
ORDER BLANK		
Order No.	Date	19...
To		
Of		
Please ship via		
The following items, to-wit: When		
QUANTITY	DESCRIPTION OF ARTICLES	PRICE
		
Please do not fail to put our order No. on your bill, and oblige,		
Yours truly,		
Town	State	
Remarks:		

Fig. 1. Purchase Order, 5.25x8.5 inches high.

name and to cash received, bills received, or miscellaneous column to left. It is now plain that a double-entry system is to be used in all transactions. Entries are made for buildings and fixtures, real estate etc. and posted to ledger. Now that the resources are known, yard is ready to be stocked up.

The writer will take a car of material and follow transactions from order to collection from buyer of part of car. The order is made out in order book and carbon copy left in book. Invoice of car is received which, for example, is a car of 2x4s. Bill is either discounted or note given. Enter on journal in cash payout column and lumber column, or bills payable and lumber columns. Invoice is then filed in a file and binder of letter size. Other invoices are filed as they come in and arranged alphabetically according to firm names. At the end of the month take volume from file and place a heavy piece of paper on top and bottom, fasten

memo is made out for note and receipt given him for cash payment. Slip is numbered and entered in journal under personal accounts credit column and cash received and bills receivable debtor columns. His note becomes due in the billbook, used as a memorandum for notes and time drafts showing when become due; any payments made, security given, renewals, location of indorser, and remarks regarding

his credit, payment is made. A credit ticket is made out, numbered, dated and entered in bills receivable column for face of note, interest in interest column and entry balanced in cash received column. Other transactions are handled in respective columns. Insurance, for instance, would be entered in cash paid out and cash expended, yard column. Freight same. Stationery is entered in cash paid out and

cash expended expense columns. Salaries account is handled in like manner. These entries are then posted to ledger to corresponding accounts.

In the lower rulings to the left one glance will show balance of cash on hand in office and bank balance. Middle rulings show total outstanding accounts, always in balance. To the right bills receivable account is balanced, with the

DAY BOOK															SHEET NO. _____									
Yard _____				Date _____ 191 _____				Agent _____																
DATE	L'S/R PAGE	T'S/T NO.	NAME	CREDIT SALES	CASH SALES	LUMBER NO. OF FEET	MOULDINGS LIN. FEET	AM'T	MACHINERY AM'T	HARNESSES AM'T	MISCEL AM'T	LUMBER BOARD FT.	SHINGLES M	FRAMES NO.	DOORS NO.	WINDOWS NO.	SCREENS NO.	STORM WIND. NO.	PAPER NO. RLS	WOOD/NO NO. BOLS.	SHICK NO.			
												F'd Sheet No.												
												Am't Received												
												Sales												
												Balance On Hand												
												MOULDINGS NO. FEET	LATH BOLS.	LIME NO. BBLs.	PLASTER NO. SCKS.	CEMENT NO. SCKS.	POSTS NO.	NAILS NO. LBS.	PAINT NO. GAL.					
												COAL HARD NO. TONS	COAL SOFT NO. TONS	BUGGIES NO.	WAGONS NO.	BOBS NO.	DRILLS NO.	DISC NARROWS NO.	COLLARS NO.	SADDLES NO.	SINGLE HARNESSES NO. SETS			
												F'd Sheet No.												
												Am't Received												
												Sales												
												Balance												
												WOOD NO. CORDS	WOOD CHUNKS NO. CORDS	PLOWS GANG	PLOWS SULKY	PLOWS WALKING	PLOWS SHARES	RAKES NO.	MOWERS NO.	BINDERS NO.	HEADERS NO.			
												F'd Sheet No.												
												Am't Received												
												Sales												
												Balance												
			TOTAL FOR DAY																					
			FORWARDED																					
			TOTAL FOR MONTH TO DATE																					

Fig. 4. Salesbook, line form. Single yard form is the same with stock record omitted.

The stockbook may be either a bound volume or looseleaf book ruled with spacing shown. It is an invaluable asset to the yard management. The date of shipment received and car number with initials is entered in the column headed Date. Number of pieces of material received in column corresponding to their length or size. When sale tickets are all numbered and posted amount of sales may be entered from them to stock sheet. This may be done daily or weekly according to amount of sales. Sales and receipts are then totaled and balance on hand obtained and forwarded to next sheet in receipts column. On the last sheet of each week, month or on the daily sheet a graphic illustration of the total sales may be made with red ink by stock clerk or bookkeeper. With the figures to the extreme left of sheet and red line a profile of sales is shown. The best sellers of any line of material is very readily seen. To keep stock in the best condition possible the manager of yard must beware of the two extremes of this profile. He can arrange his orders from same, by ordering a greater percent, or less as the case may be, of any one length or kind of material.

[illegible]

Fig. 6. Note Record, loose leaf 5x8 inches wide, including binding margin.

In this case journal and daybook are made with a white sheet and a yellow sheet for a carbon duplicate to be taken along perforated line and mailed to general office. A looseleaf ledger of same rulings is kept by line yard with a cash account, bills receivable account and general office account and all personal account estimate book are made with twotomter and the other for general book of line yard. Stock sheet sent to general office, but the daybook sheet should be aut office, as the yard agent orders. The general office is given a cash hand daily from daybook sheet complete itemized inventory of

A. K. GAUBE.
Deapolis, N. D.

EDITORIAL DISCUSSION.

What the contributor calls a "daybook" in his text is reproduced in Fig. 5, and is, as there titled, really a salesbook because it records nothing but selling transactions. A second form was submitted for single-year use, in which the money columns were the same as

<h2 style="margin: 0;">FIRM NAME</h2> <p style="margin: 0; font-size: 1.2em;"><i>Wood, Coal and Lumber</i></p> <p style="margin: 0; font-weight: bold;">SAMPLE CREDIT MEMO.</p>					
No. _____				Yard _____	
Account _____	Name _____		Date _____		
Pieces	Description	Lin. Feet	Bd. Feet	Price	Amount
<div style="position: absolute; top: 0; left: 0; right: 0; bottom: 0; border-bottom: 1px solid black; border-right: 1px solid black;"></div> <div style="position: absolute; top: 10px; left: 10px; right: 10px; border-bottom: 1px solid black; border-right: 1px solid black;"></div> <div style="position: absolute; top: 20px; left: 10px; right: 10px; border-bottom: 1px solid black; border-right: 1px solid black;"></div> <div style="position: absolute; top: 30px; left: 10px; right: 10px; border-bottom: 1px solid black; border-right: 1px solid black;"></div> <div style="position: absolute; top: 40px; left: 10px; right: 10px; border-bottom: 1px solid black; border-right: 1px solid black;"></div> <div style="position: absolute; top: 50px; left: 10px; right: 10px; border-bottom: 1px solid black; border-right: 1px solid black;"></div> <div style="position: absolute; top: 60px; left: 10px; right: 10px; border-bottom: 1px solid black; border-right: 1px solid black;"></div> <div style="position: absolute; top: 70px; left: 10px; right: 10px; border-bottom: 1px solid black; border-right: 1px solid black;"></div> <div style="position: absolute; top: 80px; left: 10px; right: 10px; border-bottom: 1px solid black; border-right: 1px solid black;"></div> <div style="position: absolute; top: 90px; left: 10px; right: 10px; border-bottom: 1px solid black; border-right: 1px solid black;"></div>					
Original and Duplicate		Total			

Fig. 7. Credit, memo., pink stock, 4x7 inches wide.

here shown, but lumber, machinery, lumber and miscellaneous are represented by money columns only, and the quantity columns for lumber and moldings are omitted. The stock sheet columns to the right are also

[illegible]

Fig. 8. Corner of stock record sheet, 17 inches square.
Note diagram line near bottom.

omitted and the ruling occupies half the sheet and is repeated on the other half. For lineyard use these original entry books are printed on righthand page, one side of sheet only, and are made in duplicate, white sheet perforated to detach and send in and railroad manila duplicate remaining in the book as the yard record.

Inasmuch as duplicates of the numbered sales tickets (Fig. 2) are mailed to the home office it is not clear what good purpose is served by writing the names of customers on the sales sheet. Why not use ticket numbers only and save the extra writing

The condensed stock report is excellent as a means of keeping the home office informed as to condition of stock and reminding the local manager of articles needing attention. It is evident, of course, that some separate figuring is required in order to condense the day's results into this form, but it is quite desirable that this be done.

The combined cashbook and journal of columnar form is well devised and the summary forms at the bottom are a customary feature of line forms, but the arrangement here is simpler and better than in some of the complicated forms used. A peculiarity of the money-column arrangement is that whereas in columnar journals if the money columns are separated into two divi-

Enter O. G. Batts, O. G. Casing—Lineal.
Enter Mouldings, all kinds—Lineal.
Plain Casing enter as Finished.
No. 1 Fencing enter as Finish.
½ x 3 Batts—Surface Measure.
Enter all Coal in Pounds.
Dimension in Pcs.
“ 10 ft. when no space is given as halves of 20 ft.
“ 8 “ “ “ “ of 16 ft.
“ 6 “ “ “ “ of 12 ft., etc.
Ending-----190-----

Sept.

Fig. 9. Instructions printed on one corner of Stock Sheet.

sions the left is all debits and the right all credits, this form is so classified that transactions involving the receipt of money will go into the right-hand columns,

while cash payments are taken care of in the left-hand columns. Separate columns are provided for petty expense and yard expense. An interest column is provided at the right for interest received, in connection with notes receivable, but none for interest paid out, so presumably it is charged into the expense column.

Usually a columnar journal is so arranged as to take care of all classes of transactions and shows sales also, posted in a single daily entry from the sales book totals, which are then dropped and new totals accumulated for the next day's sales. Here the sales book is a separate direct posting record, and while the totals are carried forward from day to day they are carried to the foot instead of head, and the day's total is exhibited before being merged with the total forward.

Some line forms submitted extend cost price as well as selling price on each sale and figure the daily sales profits on the daily report. This requires twice as much labor in extension. In this system the profit results are exhibited by inventory in monthly closing, and a perpetual stock record is kept. A printed stock sheet is submitted, about seventeen inches square, printed on both sides and with a capacity for 267 separate items, mostly printed in but with some blank columns left for additions. On account of its size only a corner of the sheet can be reproduced, showing the arrangement. The

DATE _____ 191__												CASH BOOK AND JOURNAL												PAGE NO. _____											
LUMBER CR.	MACHINERY CR.	HARNESS CR.	MISC. CR.	BILLS PAYABLE DEBIT	CASH EXPENDED YARD	EXPENSE	CASH CREDIT	BILLS RECEIV. DEBIT	PERSONAL ACCOUNTS DEBIT	L.G.W. PAGE	DATE	T.N.T. NO.	ACCOUNT	PERSONAL ACCOUNTS CREDIT	BILLS RECEIV. CREDIT	INTEREST	CASH DEBIT	CASH DEPOSITED IN BANK	MISC.	BILLS PAYABLE CREDIT															
													TOTAL THIS DATE																						
													BROUGHT FORWARD																						
													TOTAL TO DATE																						
Cash Balance f.w'd													Total outstanding Acc'ts f.w'd							Total Bills Received Acc't f.w'd															
Cash Received this Day													Credit Sales Day Book No.							Notes taken this Date															
Cash Sales Day Book No.													Debit Acc'ts on this Date							Total															
Total													Total							Credits to Bills Received this Date															
Cash deposited in Bank													Credit to Acc'ts this Date							Total Bills Received to Date															
Cash Paid out													Total Outstanding Acc'ts to Date																						
Total																																			
Balance at close.																																			

Fig. 5. Journal, with special recapitulations.

lower portion is used to record amounts from sale tickets, which are then totaled and deducted from on hand and received. In the lower space a diagram line is drawn to represent amount of sales, based on the marginal quantities, and its fluctuations show relative activity of the stock items. In drawing this line the columns in which there have been no sales are ignored and it is drawn straight toward the proper indicating point in the next succeeding column in which sales are recorded. Only the angles of the line therefore are to be read as having significance.

The note record (Fig. 6) is a special looseleaf form of excellent arrangement. The sales ticket needs no comment except to call attention to the fact that it has column for pieces as well as feet, which is desirable. Sales tickets are often used for credits and acknowledgments of cash on account, and entered through special column in sales journal. Here a special credit ticket is provided in duplicate, and there is also a cash receipt form. The systematic use of a printed numbered purchase-order form is desirable. The lumber salesman and his duplicate-order book usually look after this, but it is better to handle purchasing on own order numbers, even though in certain cases it may be convenient to issue order only as a dummy, inserting amount and confirming attached copy of salesman's order and referring to it for details.

The estimate form submitted is a good standard form which other contributors also have sent in. It is reproduced here for once and for all and will be referred back to as necessary. The customer's copy of course is perforated to tear off the cost price column. It would appear from the contributor's description that the customer is charged with the total amount of the estimate to start with, and that lumber (or whatever merchandise concerned) is credited with deliveries only as made, and that therefore the daybook will be out of balance with the amount remaining undelivered, until the transaction is closed. It might be better to segregate this suspense difference by having an additional pair of columns for estimates. Credit this column with the total sum when customer is charged, and charge it with deliveries when merchandise is credited with them, and let it carry the difference until closed out, not only with this one customer but with the entire lot of estimates partially filled, so it will show the value of balance undelivered at all times and yet leave the book as a whole in balance.

The system here described appears to supply all the specialization required for branch line yard accounting, and yet to answer equally well the requirements of a simple system for a small single yard which summarizes and presents the results of the day's business in a manner which does not require trained accounting experience either to write up or to understand.

A Minnesota Retailer's Contribution— Sales and Credit Tickets Filed in Vertical Folders for Each Customer—Daily Statement Form of Journal—Good Auxiliary Forms.

SYSTEM FOR AN AVERAGE YARD.

Responding to your request for letters on methods of book-keeping I am sending you a description of a system that I have used for the last six years and have found simple, labor saving and adequate for the average retail yard. The necessary equipment for this system is as follows:

Duplicate sales ticket books (Fig. 1).

Duplicate credit ticket books (Fig. 2).

Six covers for the above.

One vertical file with index cards, 500 plain folders

No. 889.	Houston, Minn.,	11/1	1910
Mr. Ch. Benson			
.....			
WE CREDIT YOUR ACCOUNT			
By Cash	- - - - -	35	60
By Merchandise	- - - - -		
By Discount	- - - - -		
TOTAL TO BALANCE ACCOUNT		35	60
With thanks and soliciting your future patronage, we are, Yours truly, PETERSON & IVERSON, Per.....			

Fig. 2—Credit memorandum form, same size as sales ticket, and duplicate is filed in customer's folder in the same manner.

and one colored folder for each index card; this file to be of convenient size for holding sales tickets.

Special ruled and printed loose leaf daily record sheets (Figs. 3 and 4).

One springback binder for record sheets.

One transfer binder for record sheets.

Loose leaf ledger with two sets alphabetical indexes, and one set of index tabs for subdivisions of merchandise accounts.

One transfer binder for ledger.

One 31-day desk tickler.

One duplicate remittance book (Fig. 5).

One trial balance book for accounts receivable.

Duplicate order books (Fig. 6).

I have found in using the ordinary lumber sales book that fully one-fourth of the time required for the book work was taken up copying the original entries from memorandum books into the salesbook. This time is saved by using duplicate sales tickets, bound in book form, fifty originals and fifty duplicates. These books are slipped into covers made for the purpose and can be conveniently carried in the pocket. Original entries of sales are made in these books and no copying is necessary. Some make an objection to tickets on account of the danger in losing or misplacing them, but if books are made with only originals perforated this trouble is avoided. The duplicates then remain in book form, after originals are taken out, and are filed away, becoming a permanent record which can be referred to should original become lost or misplaced.

After being entered on daily record sheet, mentioned above, the original sales tickets are filed in a vertical file, each customer having a plain individual folder. Tickets for petty accounts are filed together in colored folders, of which there are one for each index card. By this method sales to any one party are found together in one folder. These tickets can be easily taken out and checked with the ledger account or estimate, and on itemized account can be made in short order.

The duplicate credit tickets for cash on accounts and on notes receivable, merchandise returned and discount are bound in book form the same as sales tickets, but are of different color. When cash is paid on account original is slipped out and given to the customer as receipt; in case of merchandise returned or discount original is filed in folder with sales tickets. By using this method for all credits on account one is sure that all credits are booked and trouble from that source is avoided.

The daily record sheet is a combination of recapitulation sheet for sales tickets on one side and journal and cash account on the other.

Sales tickets are numbered and entered on recapitulation sheet, the items being separated and entered, quantity and amount, under the subdivisions of merchandise, such as lumber, shingles, lath, millwork, moldings, doors and windows, paper etc., total amount of each ticket being entered

in "total amount" column. After tickets for day are all entered columns are all footed and the sum of "amount footings" should check with sum of "total amount" column. This will prove addition on all sales tickets for day. Quantity and amount totals are transferred from recapitulation sheet to sales account on journal sheet. Cash sales tickets are checkmarked when entered on recapitulation sheet and total entered in cash account as cash sales.

Sales tickets for credit sales are next entered under credit sales on journal sheet, name of customer, amount of ticket and number being entered. Cash sales and credit sales are totaled to check with sales account total.

From credit tickets cash on account is entered direct to cash account, name and amount of payment being entered. Merchandise returned and discount are journalized under journal entries, merchandise being separated as on recapitulation sheet.

Credit sales for day are added to accounts received forward and cash on account, merchandise returned and discount on accounts received subtracted from this sum, giving accounts received outstanding.

Expense bills are entered direct to cash account. Remittances are entered from duplicate remittance book. Invoices are journalized under journal entries, merchandise being separated for the different accounts. After booking, invoices are filed ahead in a 31-day desk tickler.

Ledger is divided into three sections: merchandise, accounts and notes receivable and general accounts and accounts payable. No cash account is carried in ledger, there being no necessity for it.

From record sheet merchandise is posted to the different accounts in merchandise section of ledger, both quantity and amount being posted. At the end of month columns are totaled in red ink and carried forward. In this way the merchandise accounts also become a stock sheet, which is kept without any special effort. This stock sheet may not be as extensive as some others, but is adequate to locate shortages, if any, and to determine size of stock in case of fire or other accident, and we believe that the above described method will serve the purpose for the average individual yard, where the stock is under the eye of the manager. If in addition to the above the yard stock is filed and stored systematically and a duplicate order book is used for all orders, no dealer need go very far wrong in ordering or selling material.

In accounts received section of ledger the first page after each index sheet is used for petty accounts. This makes it more convenient to take off a trial balance of accounts received, which is taken at the end of every month. A trial balance book ruled for twelve months is used. Trial balance is checked with accounts received outstanding on record sheet. Statements sent out are noted on trial balance.

I. G. IVERSON, Successor to Peterson & Iverson.

EDITORIAL DISCUSSION.

The system described has some resemblance to that

submitted by A. K. Grube and already published, Mr. Grube using separate salesbook or sheet and cashbook-journal sheet, while herein both are combined on one large loose leaf page, the back used for sales recapitulation and distribution to merchandise accounts. The merchandise classification is very complete and carries quantities as well as values, which also go to the ledger and are noted in the explanation column.

The form of daily statement is much like that often used in lineyard work, though the contributor evidently uses it for a single yard only. By a summarization of tickets on which the transactions are first recorded, the

day's work is condensed into a brief record of the results. Journal entries are double entry with a single money column, the amounts being posted separately to both debit and credit accounts, as indicated by the explanations. Such a form has its merits, and among its demerits is that all the ledger accounts except cash are carried in the ledger and require posting, which the columnar journal form does away with to a considerable extent.

Besides the sales ticket a credit ticket form is used, of commendable design. As shown by the cuts, tickets are distributed to customer's folder in a vertical file. These are used from which to make the statement, but get on the customer's ledger account by being posted individually from the daily statement.

By having two extra "total amount" columns on the recapitulation sheet, one marked "charge" and the other "cash," the separation could be made direct without refiguring, the total of the two columns balancing the total of the merchandise distribution columns.

An order form already has been published, and this contributor's form is also offered for comparison. His remittance blank is the first to be published and is of excellent arrangement, but might well be a voucher check to be cashed by the payee and come back again as a receipt, doing away with the necessity of acknowledgment.

Where the bookkeeping task is sufficient to keep one man busy it is desirable that the books be so arranged, as far as possible, that the record of transactions be completed as they occur, in such form that ledger posting may follow. In the form herewith submitted there appears to be little that can be entered, except the journal entries and the balances forward from previous day, until the day's business is concluded. The making of the daily statement is a matter therefore for attention probably the first thing the following morning. In the ordinary lumber yard, however, this is an advantage rather than otherwise, as the time required for the books is comparatively short, and no attention need be given them during the busy hours except to see that the ticket record of each transaction is properly made, leaving the summarizing to be done at one time as a single task.

As the contributor says, his quantity columns carry information as to stock on hand by departments which answer many of the purposes of a stock record by items; but the latter serves various purposes which the shorter method does not, especially in anticipating and preventing shortages of items in frequent demand. To keep the record as herein shown, however, is much better than keeping none at all, takes little time and would afford a basis for interesting tabular statements by months for the fiscal year as to quantities handled by the different departments, average cost and sale price per quantity unit etc.

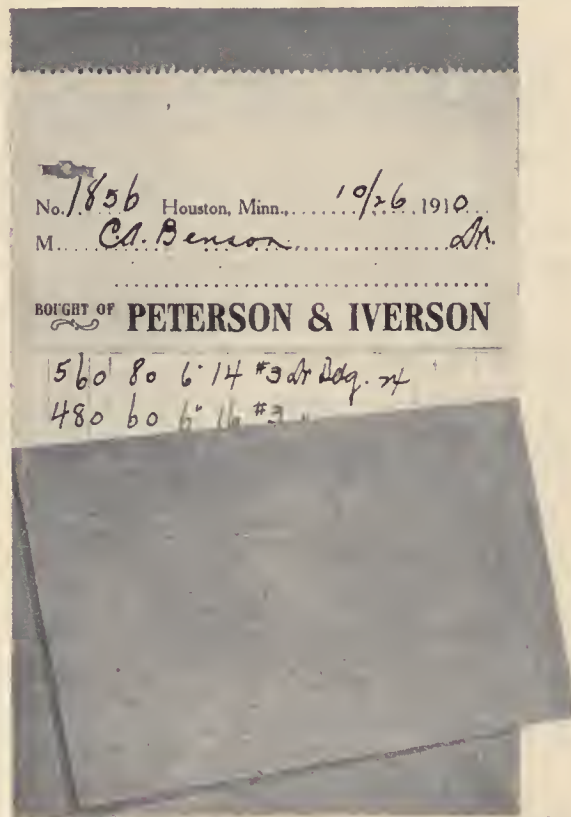


Fig. 1—Sales ticket, 3.5x7 inches, showing also folder in which each customer's tickets are kept for current month. Name on jacket flap shows poorly.

L. P.	SALER ACCOUNT	L. F.	CASH ACCOUNT	D.R.	C.R.
DATE <u>Nov. 1,</u> 19 <u>02</u>					
NO. <u>86</u>					

The use of loose leaf books, the adoption of substantial loose covers for the duplicate ticket books, the generally excellent arrangement of the printed forms used, and the complete supply of kinds of forms are all indicative

[illegible]

Fig. 3.—Dunly Larkspur Journal page, 9.75x16.5 inches, with 2.25-inch loose leaf margin at left, not shown. Merchandise distribution at top of first column is obtained from form shown in next figure.

of business enterprise and progressiveness. The daily summary form is well adapted to a small yard—as for instance in its capacity for recording charge sales—and gives a good summary of sales and cash and condition of accounts receivable, but accounts payable are not summarized, and in other respects it does not give the general condition of resource and liability accounts which is always shown by a properly designed synoptic

PETERSON & IVERSON							Builders of BUILDING MATERIALS	
HOUSTON,							TEXAS.	
M. Payee's Full Name My Co. <i>McGraw Hill</i>							REMITTANCE BLANK NO. <i>111-</i> <i>10/1/10</i>	
							130.	
Enclosed please find <i>Ck</i> for amount of invoice as follows:								
DATE OF BILL	AMOUNT	FREIGHT	OVER INCHARGE	RETURN	ARTS & CTS	SUMMARY		
<i>10/19</i>	<i>14 75</i>					Bills	<i>\$ 24 71</i>	
<i>10/21</i>	<i>9 99</i>					Frgt. \$		
						Over 1		
						Over 2		
						Rc'ts		
						Dis'ts	<i>45</i>	
						Total Credits -	<i>\$ 45</i>	
						Exceeds to Bal.	<i>\$ 25 70</i>	
TOTALS	<i>24 71</i>			<i>75</i>	<i>45</i>			
Remarks:								
Please acknowledge receipt, and oblige. Yours respectfully, <i>J. G. Peterson</i>								

Fig. 5—Remittance blank, duplicating on plain manila paper. Size about 6x8 inches.

or columnar journal, several forms of which already have been shown. The chief advantage of the daily statement form is that it is so arranged that it can be duplicated in carbon in a line branch yard for forwarding to the main office, and it has been developed and is used most largely for that particular purpose. Two of the best developments are those of the present contributor and the one already described by A. K. Grube, and the two

should be compared to note their distinguishing differences.

"A. PETERSON.
I. Q. IVERSON.
Order No. _____ Date _____ 190_____
M _____
Ship to PETERSON & IVERSON, Lumber Dealers,
HOUSTON, MINN.
How Ship—C. M. & S. P. Ry. When _____
Terms: _____ Am't \$ _____
MADE BY THE WESTERN & SOUTHERN CO., CHICAGO, ILL.
Feet Size Length FEET. PRICE AMOUNT

Fig. 6—Order form 6x10 inches high, linen stock, duplicating on blank tissue.

A Complete and Well Designed Set of Duplicate Forms for Lineyard Accounting—Novel Trial Balance Sheet—Special Cash and Bank System—Points in Credit Carrying.

This article describes a newly developed lineyard system in which novelty of design and excellent printing of forms are prominent:

A SPECIALIZED LINEYARD SYSTEM.

We have had our troubles, but are now over them, so far as our books are concerned, and are only too glad to offer what suggestions we can to those who are struggling with the proposition.

While we are a vineyard company and keep a duplicate set of books at the general office, we believe that we have evolved a system that is complete and satisfactory in all its details and one that can be applied to any re-

tall yard, at least we find it so, and besides it is so simple that anyone with ordinary business intelligence, whether he be bookkeeper or not, can understand it. It requires but a small clerical force and our yard managers do not spend more than one hour each day on their books. In one of our yards doing a business of better than \$200,000 a year, we have but one bookkeeper, who also makes the itemized bills and acts as cashier, and he finds ample time to do all this in nine hours, and no night work.

One of our lady bookkeepers in the general office keeps duplicate sets for three yards that do a collective busi-

[illegible]

Fig. 1. Delivery ticket, 4x6.5 inches wide, duplicate.

ness of about \$20,000 a month, and takes only about three hours each day, which includes the time spent on checking extensions etc., and all trial balances are out by the second day of each month. We use the following forms:

Duplicate Order Tickets (Fig. 1).

Triplicate Sales Tickets (Fig. 2).

Duplicate Bill Book.

Cash Book and Journal, with columns to cover

RECAPITULATION OF DAILY SALES														DATE <u>Nov 1</u> 19 <u>60</u>			
TICKET	LUMBER		SHINGLES		LATH	MILL WORK	MOULINGS	DOORS, WIND'S ETC.	PAPER	LIME	PLASTER	CEMENT	BRICK	SACKS	GAL. RFG.	SUNDRIES	TOTAL AMOUNT
NO.	FEET	AMOUNT	NO.	AMOUNT	NO.	AMOUNT	FEET	AMT.	AMT.	BU.	AMT.	LBS.	AMT.	NO.	AMT.		TICKET
1	1923											10.80		24	24		12.20

Fig. 4.—Recapitulation of merchandise sales by fifteen departments, occupying back of loose leaf sheet shown in Fig. 3, and running across the wide way of page, 16.5 inches. Distribution is both by quantities and by money amounts, and both are posted to merchandise accounts in ledger.

Referring to Fig. 8, the first month's trial balance is made on the narrow sheet with printed headings and line numbers for accounts, punched for loose-leaf binder and printed one side only for carbon duplication to general office. The sheet for the next month goes directly underneath and is wider to the extent that the money columns project. Without rewriting the accounts, therefore, the new amounts can be extended opposite, and any new accounts added. The next month's sheets are still

BANK	
NO.	Yard. 19
BALANCE	
DEPOSITED	
BALANCE	

Fig. 6. Daily bank statement, duplicate; same size as Fig. 5, yellow.

The daily cash statement takes cash sales as one item from the sales tickets, and cash received on account as one item from the column of the distribution sheet.

Fig. 7 is a semiannual form for listing accounts due. These are, of course, shown on the monthly trial balances, but the idea here is to keep track of these particular accounts and trace them month by month until closed out. After six months a new list is made, those carried

Form 5-204-2m

LIST OF NOTES AND ACCOUNTS

YARD

190

ACCT. No.	NAME	FOLIO	AMOUNT	FIRST PURCHASE	LAST PURCHASE	COLLECTIONS MONTH OF
					Jan	Feb
						March
						April
						May
						June

Fig. 7. List of notes and accounts, 8.5x11 inches high; runs six months before rewriting.

[illegible]

Fig. 8. Trial balance sheets, loose-leaf, 16.5 inches high. first sheet 6 inches wide, sixth 14 inches wide; six successive overlaps, running six months without rewriting.

from the old list being marked in red ink. Collections on these lists are figured into percentages for the purpose of comparing the records of the various yards, and comparing also with previous years.

In reproducing this system for single yard use it might be desirable to let Figs. 5 and 6 be represented by permanent books of usual form, since there would be no need of carbon duplication; or in place of Fig. 5 use individual cash tickets for petty items, and let other cash go direct to cash columns added to Fig. 3 form. The forms are so clear and simple as not to require further explanation or comment other than the reader may make for himself. The contributor explains, however, that in addition to these duplicate forms the bank statement and vouchers also are forwarded to home office with the trial balance, forming a complete audit on the branch office operation.

CASH ON HAND.		Yard.	190
GOLD, 20s			
10s			
5s			
CURRENCY 50s			
20s			
10s			
5s			
1s & 2s			
SILVER, 1.00			
.50			
.25			
.10			
.05			
TOT. MONEY			
ITEMIZE ALL CHECKS			
ON HAND			

Fig. 10. Daily cash balance, same size as Fig. 5, duplicate, pink.

REMITTANCE									
THE HALLACK LUMBER AND SUPPLY CO.									
WHOLESALE AND RETAIL									
Denver, Colorado. 191									
M									
Gentlemen									
We enclose herewith our Draft No. In (Number of) invoices as follows.									
Date	Car No.	Invoice	Freight	Est. Freight	Adv. Pmt.	Chas.	Discount	Draft	
NO RECEIPT NECESSARY									
Yours truly, THE HALLACK LUMBER AND SUPPLY CO.									
By									
Remarks									

Fig. 9. Remittance form, 7x8.25 inches wide.

An Indiana Lumberman's Painsstaking Article—Columnar Journal or Daily Exhibit the Backbone of the System—Card Ledger Used—An Autograph Register an Essential Feature.

BOOKKEEPING IN THE RETAIL LUMBER YARD.

The question of bookkeeping in the retail lumber business, like a few other important issues, is looked upon by many as a matter of secondary importance, therefore receiving little or no attention. Yet when viewed in the light of modern business methods it must be conceded that this is one of the questions of vast concern entering into the successful operation of a retail lumber yard. The modern business manager is not satisfied with knowing the fact of a loss or a profit at the close of the business year; he desires to know why, how and where such loss or gain was sustained so that he will be better enabled thereby to fortify his business for the future. In order that he may acquire that knowledge a certain amount of detail will be necessary. I am aware that the matter of detail in this line of business has been the subject of articles appearing in some of the leading lumber journals of the country and has been adversely criticised in many instances, yet I still agree with Mr. Saley to his indorsement of detail. Without it certain embarrassing and otherwise avoidable errors are bound to crop out here and there which, with the adoption of a simple safeguard system, could readily be prevented.

Of all the reports which the manager requires placed before him in order that he may obtain constantly, quickly and

accurately a bird's-eye view of the business situation, the most important are those relating to finances.

Cash on hand and collections are important factors which indicate when bills may be paid and cash discounts saved. It is customary, therefore, in all well regulated business operations, to draw up a monthly statement of accounts receivable immediately following the first of each month. In order to do this correctly it is necessary to have some established method of keeping a complete record of accounts. The double entry system of bookkeeping is the best adapted and most satisfactory for this purpose. I shall take this matter up under the following heads:

- (1) Daybook
- (2) Cashbook
- (3) Journal
- (4) Ledger.

Since the Daybook is the basis of all other records it is evident that on the making of this record will hang the accuracy of all the other records entering into the complete set of books.

The most valuable sort of Daybook that can be devised is one which may be obtained and built up from carbon copies

O. M. Hendrickson		W. N. Hendrickson			
HENDRICKSON BRO'S & CO.					
SUCCESSORS TO F. BRADSHAW & CO.					
—DEALERS IN—					
LUMBER, LATH, SHINGLES.					
HARD AND SOFT COAL.					
OFFICE AND YARD, 190 No. Main St.					
PHONE NO. 40					
Statement					
MR.	John Dor				
	310 Pontac St.				
NO.	ROCHESTER, IND. April 1 1911				
POS.	DIMENSION	FEET	PRICE	\$	QTS.
Mar	Statement Read			11	50
10	3 tons Nut Oak		7.12	23	25
18	5-1x8-12#1 Pine	40	2.50	1	00
	Total			35	75
29	Cash on 70		\$10.00		
31	" " "		\$20.00	30	00
	Balance			5	72

Fig. 1. Sales ticket form, showing how it is also used for a monthly statement. Size 5x6 inches.

of all bills or invoices and receipts given to customers during the course of the day's business. It should be a recognized fact that such a bill or invoice should be made for each sale and a receipt given for each payment on account or for lumber returned. It not only will protect the customer but will be a safeguard to the dealer. As a mechanical device for the handling of such tickets an autograph register is very economical but not absolutely essential in the installation of such a system. The local printer can print, number and bind into pads these tickets at a nominal price, using, for instance, white paper for the original and buff for the duplicate. The same tickets are used for receipts by scratching out the "Sold to," and inserting "Received of," preceding the customer's name. The entry for credit will occupy the body of the ticket and receipt by the usual signature of the firm's name below.

The carbon copies of these tickets are retained on the file peg in the office and at the close of the day's business are arranged in numerical order and properly entered: the sales tickets into the sales record and the receipts into the journal. The tickets are now ready to be placed on the file for that purpose. At the close of the month they may be removed from this monthly file and placed into the transfer file and there retained for future reference. Hence you have built up a daybook that no customer can gainsay.

The monthly statements are also made up on these tickets. If they are to be mailed the carbon copies are retained in the office with proper notation as to date of mailing, etc., or if the accounts are handled by a collector, instead, he has carbon copies of all receipts for the day's work, with proper notation of partial payments, promises, removals, and any other information which he may deem useful to the manager in the operation of accounts with that customer in the future. The carbon copies returned by the collector or retained from statements mailed are placed into the tickler, which the manager refers to daily, enabling him to make good these promises, etc., as they shall fall due.

The Cashbook and Journal I shall take up together since I have combined them into one record, which, for convenience, I will name the daily exhibit, and will hereafter refer to it as such. An ordinary double entry 10-column journal is used for this record. The idea of using a 10-column book for this record is for the purpose of sectionalizing the accounts, the value of which will be more readily appreciated when we speak of the ledger. A comprehensive view of these ten columns will be as follows:

- (a) Accounts receivable
- (b) Accounts payable
- (c) Private accounts.
- (d) Cash account
- (e) Bank account.

The accounts receivable are accounts with your customers and here occupy the first two columns of the daily exhibit, as debit and credit items respectively. In order to amplify the information of the manager I have added another book

to this section which I will name the sales record. Besides saving space in the daily exhibit it saves time in posting to the ledger. The sales record contains a number of columns depending upon the several divisions the manager desires to make in the merchandise account. The value of these columns will be taken up later under the head of private accounts.

The daily sales are entered into the sales record from the sales tickets as has been previously referred to, while the credits are entered directly into the accounts receivable section of the daily exhibit. The items in this section of the daily exhibit are posted daily to the ledger, which will be referred to later.

The accounts payable are the purchase accounts and occupy the second pair of columns of the daily exhibit. For the same purpose as referred to above I have added another book to this section of the daily exhibit which I will name the purchase record, similar in form to the sales record. All the purchases are entered from invoices rendered to you and posted from there into the proper section of the ledger. The debit purchase accounts are entered directly into the accounts payable section of the daily exhibit and from there posted to the proper section of the ledger.

Private accounts are such as capital stock, bills receivable and payable, buildings, real estate, equipment, cash, banks, merchandise, office and miscellaneous supplies, expense etc. The third pair of columns of the daily exhibit are used for this account. All the items in this section except the merchandise accounts are entered daily in these columns and posted to the proper section of the ledger. The merchandise accounts are posted monthly from the footings of the several columns of the sales record and the purchase record. These two books as referred to above may have any number of columns governed by the divisions desired in the merchandise account. On the left hand side of each of these books is the usual space for the date, customer's name and ticket or invoice number as the case may be. The divisions may be similar to the following: Total sales, coal, lumber, shingles, lath, doors and windows, hardware, roofing, brick, posts, molding, etc. Much time is saved since these are footed and posted only at the close of the month instead of posting the items daily, as would be necessary had they been entered directly into the daily exhibit.

At the same time that the footings of the merchandise accounts are entered in the private accounts column of the daily exhibit the total column of the sales record may be entered to the debit column of the accounts receivable and the total column of the purchase record to the credit column of the accounts payable of the daily exhibit. This is obviously for the purpose of balancing the ledger entries.

The cash accounts are those representing receipts or disbursements of cash for any purpose. They occupy the fourth pair of columns of the daily exhibit. The items of this account are not posted to the ledger. The columns in this section are footed at the close of the month and the balance en-

tered into the private accounts section and from there posted to the ledger.

The bank accounts occupy the last pair of columns of the daily exhibit and are treated similarly to the cash accounts section. After these sections have all been posted to the ledger you are ready to take off the trial balance.

The ledger is the most important record in the complete set, and after several years' experience with solid-bound, loose-leaf and later with the card ledger, I have found that the great simplicity, economy, and work-saving features of the card ledger appeal not only to the bookkeeper but commend themselves favorably to every member of the office force. It is certainly here to stay and can readily be installed in any retail lumber business without disturbing the present system of accounting but rather will simplify it.

So much depends upon the ability to secure the first-of-the-month statement of accounts receivable quickly and accurately that a card ledger would be well worth the installation if for no other reason than that checking, posting, the taking of trial balances and making up of statements are so greatly simplified. Prompt statements mean more prompt collections. The card ledger falls into three sections:

- (1) Accounts receivable
- (2) Accounts payable.
- (3) Private accounts.

The accounts receivable portion of the card ledger is divided into two classes—open and closed accounts. The bookkeeper's work is simplified at the start because he handles nothing but live records. Two sets of indexes or guides are used, one for open and one for closed accounts. When an entry is posted to an open account, which closes it, the card instead of being returned to the open account section of the drawer is placed in the closed accounts file; so that in making the trial balance and monthly statements every record in the open accounts enters into it.

The accounts payable section of the card ledger has a set of indexes or guides of different color so as to readily distinguish it from other sections. The private accounts section of the card ledger has a set of indexes or guides of still a different color.

It is now obvious that the trial balance will be taken off in three sections representing the three divisions of the card ledger, each complete within itself. An error can readily be located as to section, thus saving much time in checking.

On account of limited room in the safe we found it necessary to use a 4x6 card for our card ledger. The cost is much less than the larger size and it is sufficiently large for any ordinary purpose. I would not now adopt the 6x8 card even if the safe space did permit.

The system of bookkeeping outlined herein may from an external viewpoint seem intricate, but when looked at from the inside it is very simple and easily applied to the retail lumber business.

O. M. HENDRICKSON, Hendrickson Bros. & Co.
Rochester, Ind.

EDITORIAL DISCUSSION.

The contributor is correct in describing this as a simple and easily worked system. Certainly it can not be considered complicated as compared with some of the more highly developed ones that have been described. There are, however, one or two points in the working of it that are a little obscure in the description, but which are evident from a closer study of the article.

Since a merchandise classification is described and there is no provision of columns for it in the "daily exhibit," it is evident that the salesbook is intended to take care of all sales, both cash and charge. Its merchandise columns at the end of the month show the total credits to merchandise for the month's sales. The charge sales are charged to customers' ledger accounts direct from the salesbook, and also must in some way go to accounts receivable column in the daily exhibit, in order that that column may balance the customers' section of the ledger, which it controls. It is presumed this is carried on the salesbook in a charge column and posted at the end of the month at the same time merchandise is credited. It is evident, however, that the cash columns in the daily exhibit should receive the cash from daily cash sales, probably as a total for the day from the salesbook, but the contramerchandise credits do not come into that book until the end of the month, and meanwhile would be left out of balance.

It is understood that there is no general merchandise account in the ledger, but that this is represented by separate accounts for each class of merchandise carried upon the sales and purchase records. The daily entries of cash sales could be balanced by a credit entry to merchandise in the private accounts column, to be posted to a special merchandise cash sales account in the ledger. Then when the classified merchandise credits were posted from the salesbook at the end of the month, and the contracharge to accounts receivable, an additional contracharge would be made to merchandise cash sales, balancing the class merchandise credits in the daily exhibit, and when posted balancing out the merchandise cash sales, which is thus a temporary or suspense account. The usual way, however, is to have two additional merchandise columns in the daily exhibit, and use this to take daily credits against cash and accounts receivable columns, for daily postings of the sales footings from the sales-

book. This would be a controlling account, equal at all times to the total merchandise columns of the salesbook, which total would be accumulated until the end of the month and posted to the ledger. The journal merchandise column would then be closed over into the private accounts column, which would then balance with that section of the ledger in which the classified merchandise accounts are contained. This is carrying out the contributor's excellent sectionalizing plan by adding a monthly subsection to private accounts for the purpose of showing the total merchandise sales daily and aggregate, balancing with the similar figures of the salesbook divided as to merchandise departments. The purchase record as here described has the same merchandise columns as the sales record, and is a logical development.

If all accounts to be paid by check are first put into accounts payable, bank credits will all charge to that

1911		DT		CR		Bal	
May 10	To Cash	20.00					
15	By Cash		2.00				
20	To Cash	18.00					
25	By Cash		3.00				
Total		38.00				21.61	

Fig. 2. Form for ledger card 4x6 inches.

one account and it is possible, therefore, to take the bank column off the daily exhibit entirely and make it subsidiary to the cash columns there. The cash balance could include both cash in drawer and in bank. In the bank register deposits would be entered, and checks would be entered and totaled for the week or month and the total of checks entered in the daily exhibit as a charge to accounts payable and credit to cash. An extra column on the bank register shows the running balance in bank; but in balancing the daily cash, the cash in drawer would be added to the bank balance at the time the checks were last totaled into the daily exhibit, not taking account of checks issued later. This plan relieves the daily exhibit of these entries, and it, of course, does not fill up so fast. The charges to accounts payable are posted direct to ledger accounts payable, and, in fact, bank is here specialized in exactly the same manner that the contributor has specialized his sales and purchase records.

In preference to the plan as above described, however, the reviewer would prefer to retain the bank columns in daily exhibit and handle bank separate from cash, but still use the bank register for details and posting, bringing only daily or weekly totals into the daily exhibit bank column and figuring a running balance on the bank register to show amount in bank at all times.

This is the first article to be published in which a preference is shown for the card ledger instead of book ledgers; but this form is widely used and has strong advocates. It is a matter of individual preference. A loose-leaf book will hold greater writing area and more pages in the same cubical space, because paper is thinner than cardboard; but if the use requires removal, and especially for typewritten records, the card index has the advantage, and there are other points of difference.

The columnar journal plan as described by this contributor divides the ledger into three sections and takes the original entries, except sales and purchases, for which separate original entry books are provided. Usually it is expanded by the provision of more columns, further subdividing the private accounts column of his form and providing additional original records for bank and voucher system and for petty cash, so that the transactions come into the journal in condensed form. Just how far this may be carried is a matter of individual judgment; it is evident, however, that Mr. Hendrickson's plan is very logically and neatly developed to the extent which has commended itself to him and offers considerable advantages over the old method centering in the bound daybook and 2-column journal. Like many others submitted, it is stronger in distribution of merchandise than in analysis and subdivision of expenses.

The contributor speaks of using the sales ticket form for the monthly statement also, and Fig. 1 shows a statement made on this form. The ticket is of liberal size, well printed on heavy paper, and with its uniform copperplate gothic type is a fine example of business printing. Nevertheless, in most cases, it is considered a good investment to have a distinct and larger form for the monthly statement, one which will impress upon the customer that it is the statement on which settlement is to be made. Fig. 2 shows the ledger card in stock ruling, no printed heading, which costs money and is unnecessary. The back also is ruled for continuation of the account when front is filled. The balance column is a good feature sometimes omitted from narrow ledger ruling. No cut of the columnar journal form is given, the description of the text being sufficiently explanatory.

Typewriter Invoicing in Duplicate—Sales Kept by Departments—Expense Distributed Direct on Merchandise Departments Where Possible, Balance Pro-rated at End of the Month.

SYSTEM OF ACCOUNTS IN AN ARKANSAS YARD.

For entry in your bookkeeping contest, I submit the following description of my system, which has been gradually built up by a process of evolution.

That I may have complete insight into all the details of the business I have divided it into six departments, as follows:

- Department A, includes lumber of all kinds;
- Department B, includes sash, doors, moldings, columns etc.;
- Department C, includes shingles and roofing and building paper;
- Department D, includes hardware, paint and glass;
- Department E, includes brick, lime, cement, plaster, sewer pipe etc.;
- Department F, includes all items of delivery.

Every sale calls for a bill, and for this purpose I have adopted a billing and charging system. These bills (Fig. 1) are made in duplicate—the original being delivered to the customer at the same time with the goods or as soon thereafter as possible, while the duplicate (after being entered on the sales book) is filed in a loose leaf binder in our office under the customer's name. Opposite each item of the bill (on the duplicate) I indicate by the department letter which department should have credit for this particular item. For convenience these bills are numbered consecutively, original and duplicate being numbered the same. From these duplicate bills the entries are made in the sales book (Fig. 2). Here the customer's name is entered for his debit and the amount of the sale that comes from each department is carried to its particular column. As the bill numbers are entered in regular consecutive order, when one has been mislaid its absence at once becomes apparent, and thus a check is given against losing any charges.

When all the bills for the day have been entered I make a daily trial balance, and on this daily trial balance the debits must balance the credits. Each customer is debited the amount of all the items opposite his name in the sales book in a horizontal row, and each department is credited the amount of the items in a vertical row in its particular column. This daily trial balance reveals any mistake that I may have made during the day, and when I have it correctly balanced, I post in the usual way from it directly to a loose-leaf ledger in which each customer has a page and each department has its page also. It is obvious that my ledger

COTTER LUMBER COMPANY COTTER, ARKANSAS CLARENCE E. HOPKINS, PROPRIETOR			
Sold to	John Smith	Bill Number	1684
		Date	Jan. 1, 1911
20-1x12-10 #2 SPS	200'	\$1.50	\$30.00
100' 6d Com. nails	40'		4.00
3 windows 10x12 - 8 Lt.	1	10	3.00
1 roll sheathing felt, 50'			2.00
2 sacks cement	75'		1.50
Drayage			.50
			<u>\$40.50</u>
			11.70
Entered on Day Book			

Fig. 1. Sales invoice about 5x8 inches wide, punched for binder duplicating.

must be in balance if I have made no error in posting to it from my daily trial balance. By proving my posting by checking it over my books are kept constantly in balance. The daily balance would be as follows:

DAILY TRIAL BALANCE. JANUARY 1, 1911.			
	Dr.	Cr.	
a/c A		\$15.50	
B		10.50	
C		4.50	
D60	
E		7.50	
F20	
Smith, John	\$11.70		
Jones, William	11.20		
Cash	15.90		
		<u>\$38.80</u>	<u>\$38.80</u>

This system makes rendering statements an easy matter. The customer has his original itemized bills and the statement I send him is merely a list of the dates, bill numbers and amounts, footed up. I find that it is very seldom necessary to replace a lost bill or make an itemized statement, as the customer almost invariably keeps his bills to check with the statement. My regular form of statement is shown as Fig. 3.

In addition to the sales book I keep a common journal for entering debits and credits that are not sales, and in this all payments made by my customers and all incoming invoices are recorded. The entries in this book are, of course, included in the daily trial balance and posted from it to the ledger. When a customer pays his bills they are removed from the live bill file and put away in a transfer binder for record. Thus the live bill file contains only such bills as are unpaid and the amounts of them correspond with the debit entries in the ledger on the customer's page. With the ledger and the live bill file both open before me I can make out the statement of a customer in a remarkably short time.

It is obvious that the department account credits on the daily trial balance represent the sales from those departments for that day, so at the end of each month I make from the daily trial balances a complete sales summary (Fig. 4) which shows the sales from each department and the total sales for the month. From these sales summaries it is an easy matter to make a similar one by months for the business year, and thus I can ascertain which departments of the business are on the best footing. Every item of expense is charged, as far as possible, to the department that caused it, and thus each department is made to stand on its own feet. The overhead expense that can not be traced to any particular department is divided in proportion to the sales and charged to the department accounts before such accounts are balanced to profit and loss at the end of the fiscal year.

SALES									
283									
	A	B	C	D	E	F	G	H	
BILL NO.	LUMBER	SASH & DOORS MLDO.	SHINGLES PAPER	HARDWARE PAINT	ELC.	DELIVERY	CASH SALES	CHARGE SALES	
Jan. 1, 1911									
John Smith 1684	4.30	3.30	2.00	.40	1.50	20			11.70
William Jones 1685	11.20								11.20
Cash 1686		7.20	2.50	.20	6.00		15.90		

Fig. 2. Sales record distributing by departments. Contributors form does not have last two columns.

Cotter, Ark.,
 Mr. John Smith Jan. 10, 1911.

In account with
Cotter Lumber Co.
 Clarence E. Hopkins, Proprietor
 Dealer in
Building Material of All Kinds

DATE	BILL NUMBER	AMT.
Jan	1	1684
	3	1699
		16 00

Fig. 3. Monthly statement form.

There are many devices that save labor in connection with this system. I use for my duplicate bills a newly patented paper that makes a copy without the use of carbon paper. I also use an adding machine that sits beside my typewriter, and on which all the additions of the work are performed. An automatic numbering machine, set to number the bills consecutively in duplicate, keeps track of the numbers for me without danger of confusion. But these devices are not at all necessary to the working of the system, which is not at all costly and is adapted to any yard. Columnar sales books with columns for any desired number of departments are kept in stock by stationers and do not command the prices of special ruled books.

CLARENCE E. HOPKINS,
 Prop'r. Cotter Lumber Company, Cotter, Ark.

EDITORIAL DISCUSSION.

This contributor has a very good and complete understanding of the purposes to be attained in bookkeeping, and has worked out an excellent special plan, though not fully complete, for handling sales and billing, but the other parts of his books offer no special features. In particular he is the only contributor thus far noted who has voiced the correct idea in distributing expenses—that as far as possible they should go against the classes of merchandise which have occasioned them. Many contributors describe a very complete analysis and subdivi-

sion of expenses, which Mr. Hopkins does not, but make no provision for dividing them in just proportion on the merchandise classes handled.

The billing form used is very simple, having a heading only and no ruling, which is unnecessary for typewriter billing. The form is punched for binder, and after entering on sales book is filed to customer's name, so the binder contains together all the unpaid invoices. The monthly statement form is very simple and neat, and entirely adequate if the customer has kept his invoices to check it by, as he should. If the contributor would arrange these statements in a suitable file and post direct to them instead of to the ledger account, posting from the statement to the ledger at the end of the month (total only), he would save work and his system would be much in line with some already described.

For his salesbook Mr. Hopkins uses a stock 6-column journal, and has a set of six rubber stamps which he uses to stamp in the department headings, giving both letters and descriptions. His merchandise classification is excellent and probably entirely adequate to his needs. In the form as reproduced two columns have been added which Mr. Hopkins does not have, one for total charge and one for total cash, and the footing of the six merchandist columns balances the footing of these two total columns, taking the place of the separate balance, and connecting it as a permanent record with the page.

This contributor shows a spirit of progressiveness in his use of typewriter billing, an adding machine (which is a profitable money-saving addition to any lumber office), numbering machine, fine theory of expense and merchandise classifications etc. His handling of all book-keeping except sales in the old routine way is not in line with his up-to-dateness in these other matters; but doubtless he will recognize this in his study of this series of articles, and if another contest should offer within a year or two we predict that he would give some of the other contestants a hard race to get in "on the money."

Simple and Direct Method in Use Among Dealers in England—Expedition and Thoroughness Combined—Stock Record Laborious but Reliable—Books Employed Easily Kept and Invariably Accurate.

AN ENGLISH METHOD.

Largely used in retail firms.

The books necessary are:

1. Rough duplicate invoice book.
2. Ready money daybook.
3. Sales daybook.
4. Cashbook.
5. Bought invoice book.
6. Sales ledger.
7. Bought ledger.
8. Stockbook.

With all transactions each customer receives an invoice made out from a duplicate book and from the numbered counterfolios these transactions are entered up at the end of each day:

Ready money transactions into the ready money book; credit transactions into the sales day book, each book having columns ruled for different classes of goods corresponding to like columns in the stock book (summarizing similar goods). The ready money transactions at the end of each day are entered into the ready money book, which is totaled up and the summary or grand total for the sale of each kind of goods is transferred to the sales daybook, with the total of the monetary put in a column by itself headed Ready Money Sales. The credit transactions are likewise at the end of each day transferred to the sales day book with the total of the monetary value put in a column headed Credit

Sales Summary for January, 1911.

Day	A	B	C	D	E	Total
1	15 50	10 50	4 50	60	7 50	38 60
2		5 00	17 32	4 10	7 50	33 92
3	128 75	50	24 80	4 40	15 00	173 45
	144 25	16 00	46 62	9 10	30 00	245 97

Fig. 4. Monthly sales summary review of sash and door situation.

Sales: The sales daybook, which should be totaled up each day or week or period required, then gives grand totals for goods sold, of each kind, with monetary value which cast across them agrees with the combined totals of the credit sales and ready money sales columns.

Cashbook.

Cash received should be entered into the cashbook on the lefthand side, the cash received for ready money sales in one column headed Ready Money Receipts, the cash for credit sales in a column headed Credit Receipts, and if totaled at the same time as the sales daybook, should then give the total for ready money receipts, which should agree with the corresponding columns or total in the sales daybook, while the difference between the credit sales and credit receipts columns will give the amount of book debts owed by customers.

On the righthand side of the cashbook the amounts paid out should be entered in columns to correspond to those in the invoice book headed respectively Stock Payments, Plant and Buildings Payments, Sundry Payments, where again by deduction may be obtained the amount owing to creditors for a given period.

Invoice Book.

All invoices of goods purchased should be entered in this book and numbered with a corresponding number put on the invoice before it is filed away. Thus by using consecutive numbers the original can easily be found without trouble. These entries should be totaled out into columns marked Stock, Plant and Buildings, Sundries. The entries in the stock column are the ones to transfer to the stock book, the plant column needing no transfer, being for what its name implies, while sundries should be reserved for small ready money purchases, not for sale or stock.

Ledgers.

The two ledgers should be alphabetically indexed and into the sales ledger is posted all credit column items from the sales daybook on the righthand side and on the left side cash received from the credit receipts columns of the cashbook and from these accounts all statements of accounts due should be sent out.

In the bought ledger should be posted all items from the stock and plant and building columns of the invoice book on the lefthand side and corresponding payments from the cashbook on the righthand side.

Stockbook.

The stockbook should be started by entering in separate columns from the invoice book stock column, all goods purchased, with rate for them, to which should be added from time to time further purchases and from which from time to time should be deducted the grand totals for goods sold from the sales daybook, the individual columns thus giving at any time the stock of any particular article. This, if worked out at the purchased rate (as originally entered) and placed under each column in a different

colored ink will easily give the value of any particular stock, and also if the sold price is entered show the profit, while if all columns are cross-cast will give the total stock value in hand.

Thus may easily be obtained:

Stock in hand (from the stock book).....	
Owing by customers (from cashbook).....	
Estimated value of plant etc. (from invoice book).....	

Total	
Less owing to creditors.....	

Present position	
------------------------	--

Also

Credit sales (from sales day book).....	
Ready money sales (from sales day book).....	

Credit receipts (from cashbook).....	
Ready money receipts (from cashbook).....	

Owing by customers.....	
Stock purchases (from invoice book).....	
Plant and building purchases (from invoice book).....	
Sundry purchases (from invoice book).....	

Stock payments (from cashbook).....	
Plant and building payments (from cashbook).....	
Sundry payments (from cashbook).....	

Owing to creditors.....	
-------------------------	--

ARCHIE J. CLARKE, NORWICH, ENGLAND.

EDITORIAL DISCUSSION.

They do things thoroughly in England and this article is interesting as showing how they do their lumber yard bookkeeping; and doubtless Mr. Clarke will find the articles describing American methods of equal interest to himself. He has been so thorough and painstaking in his description that really no explanation is needed except as to some terms not familiar here, and a little comparison of the system with our routine systems. The "Ready Money Day Book" is really a Cash Sales Book; the "Sales Daybook" takes charge sales entries, and also takes a daily total from the Cash Sales Book, with a separate column provided for the cash. On this side we would throw the first book away and enter all sales tickets in consecutive numerical order on the one sales book, with separate columns for cash and for charges; and later systems do away entirely with the book, or else use it merely to recapitulate by ticket numbers instead of names, posting charges direct from the tickets. "Credit Sales" is understandable, though we usually call them Charge Sales; "Credit Receipts" means Cash Received on Account. The description of ledger posting seems to indicate a reversal of the sides of the ac-

count, "Cr." to the left. The Cash Book is an old familiar form. The Invoice Book or Purchase Record is an excellent feature of the system as described, though it would seem necessary, instead of having merely a "Stock" column that it should have columns corresponding to the merchandise distribution or departments on the sales records.

There is nothing especially new in the Stock Record as described, except its thoroughness in handling cost and selling prices on the quantities handled through the item accounts. It would require a good deal of labor to keep a stock record up on this plan; but doubtless our English brethren do not begrudge this labor, and appreciate as we have not yet learned to the importance of keeping close track of money received, disposed of or on hand, whether it be in the form of actual currency passing through the cash drawer or material passing through the yard. No one can say that the policy which hunts two days for a nickel out in the cash or trial balance, while \$5 worth of material could be taken from anywhere in the yard without the accounts ever revealing it, is a consistent policy.

Bank Accounting Systems Adapted to Lumber—No Original Entry Books, Tickets Used Instead—Trial Balance Tri-Weekly by Adding Machine—Special Ledger Plan—Sound and Original Financial System.

KEEPING BOOKS BY ADDING MACHINE.

The article published June 10 is the last of those contributed to the prize contest and selected for reproduction in practical entirety. In the fifty-eight articles it was inevitable that there should be some duplication, and the remaining articles describe systems which as a whole are practically identical with some one that already has been published.

There are a number of original suggestions covering individual bookkeeping or office system features, which have been gleaned out and will be published. As an interlude, however, this week's article will describe the accounting system used by W. M. Hazen, of Three Rivers, Mich., as exhibited last week in his office.

Mr. Hazen was a bank cashier before going into the retail lumber business, and bank accounting methods are prominent in his method of keeping books. Really he does not keep books, but only a book, the ledger being the only book record in his system,

original transactions being recorded entirely and solely on slips, as in a bank.

This sounds somewhat revolutionary, but Mr. Hazen's accounts in general arrangement very closely resemble a form used largely in lineyard practice and of which several variations already have been described. Fig. 1 shows his sales ticket, which is put up in plain pads with a yellow duplicate, which is the copy given to the customer. These are used for charge sales, for cash sales, and also as a credit memo for merchandise returned. Fig. 2 is a cash receipt which is used for practically all purposes except cash sales, where the sales ticket also records the cash received in payment. Cash sales usually are put consecutively upon the one cash ticket, totaled forward to successive sheet numbers to cover the sales for the day. For all cash payments no duplicate for the payee being required, a plain blank ticket is used.

It will be noted that none of the forms bear a serial number. A number system is some protection

LUMBER--W. M. Hazen--COAL
Sawm, Planter, Sash, Bricks, Lime, Sand and
Doors, Wire Fence, Posts, Glass, Roofing
and Building Paper
Three Rivers, Mich.....151..

Received of.....

.....DOLLARS

On account in full. Thanks.

W. M. HAZEN.

\$.....Per.....

Fig. 2. Cash receipt, duplicate, 3x6 inches wide.

against lost tickets, Mr. Hazen concedes, but it is the purpose in his office not to lose any tickets. The office copy goes directly on the patent spindle, from which the wind can not lift it, and it is as carefully guarded as cash in drawer. A lost ticket representing cash would, of course, be missed when the day's cash balance was made up; but if it represents merchandise sold on account and no stock record is kept there is no audit that will discover the loss of that ticket, unless the customer comes in with his copy to pay the bill. In many offices a numerical series on the tickets is needed to check against this possible leak. Mr. Hazen, however, is fortunate in having his office in the constant charge of a very capable assistant, Miss Etta M. Phelps, who came to his office six years ago from high school. A capable person in undivided charge of office matters is able to avoid errors which are apt to come in when office work is divided between several persons who give a considerable share of their time to yard duties.

Cash is balanced up every night, the cash tickets for receipts and payments being listed and totaled by adding machine to check up the cash on hand. Every second day Miss Phelps makes up an adding machine balance sheet, of which a sample is reproduced herewith. In making up this sample form she used fictitious amounts, not revealing any confidential information of the Hazen business, and added type-written legends for which in daily practice brief pen symbols are employed.

Charge sales are first sorted out, arranged alphabetically, posted to ledger, and listed in the first column under debits, amounting here to \$203.80. Credits to customers are then taken up, also arranged alphabetically and posted to ledger. They are then listed, but as they consist of both cash and merchandise returns, the merchandise returns are listed with the eliminating key down, so that they are printed but do not go into the total. The use of the key also causes the item to be marked with the # sign. When all the credits are listed the subtotal is taken, which is the total of the cash credits. By the use of the subtotal key the total is printed, but instead of being cleared from the machine, remains, so that further additions may be made to it. The eliminated items that have been listed are then relisted and the total taken, which is a total of both cash and merchandise credits to customers. By subtracting from this total the subtotal of cash credits the balance would show the credits for merchandise returned; but subtraction on an adding machine is more complicated than addition and gives more room for error, and Miss Phelps has preferred again to add these items and ascertain their separate total, \$10.41. This is then carried to the first column and deducted from the charge sales, leaving a balance of \$193.39. To this is added the cash sales, \$67, producing the total sales for the day with returns deducted. From this the gross profit on the day's sales, \$75.50, is deducted, leaving \$184.89 as the cost price of merchandise sold.

How Profits Are Obtained.

Just here a digression must be made to show how the \$75.50 profits have been obtained. The sales ticket form shows a blank stub at the left. Mr. Hazen has gone over the tickets and figured in this space the gross profit on each item sold, and these are totaled forward on the adding machine (on a slip, not showing on the balance sheet), and this total amounts to \$75.50. The day's transactions are now all listed except cash, which is not listed here, presumably because the cash has been balanced in a separate operation. From results here shown, however, it is apparent

that the cash record, if added, would have been, in brief:

Previous balance	\$126.70	
Cash sales	67.00	
Cash on accounts.....	62.11	
Paid out in sundry expense items.....		\$ 6.55
Deposited in bank.....		179.25
Balance on hand.....		70.01
	\$255.81	\$255.81

From this point the statement proceeds in third column to add the day's transactions to the previous account totals as taken from the preceding statement of August 3. "Books Aug. 3" means previous total of debtor accounts. To this is added the current charges, \$203.80, and the day's credits, \$72.52, are deducted to show the new balance due from customers. The merchandise account, as here shown, carries cost prices only and its balance is supposed to show the cost value of merchandise stock. From the previous balance the cost value of the day's sales, \$184.89, is deducted to show the balance of merchandise on hand. In like manner the expenses, bank account and gross profit account are forwarded. "Books credit" is accounts payable, in which there was no change on the current transactions.

A trial balance of the statement now shows that the debit balances in customers' accounts, merchandise stock, expense account, bank and cash balance the total credits in capital account, profit and loss account and accounts payable. The statement is complete except to verify the postings to customers' accounts from the tickets; and these listed from the ledger show \$9,131.28, exactly balancing with the "Books Aug. 5", and indicating that the posting has been correctly done. The sheet has therefore audited and proved the accounts as completely for the two days as is done by the usual monthly trial balance.

Personal Account.

There is also a somewhat peculiar relationship between the accounts of the business and the private affairs of the owner in this case. Mr. Hazen's relations with the bank are a private matter and do not appear on the books. When the business needs money he supplies it, and the accounts do not show whether it comes from his own funds or whether he borrows it. As far as the business is concerned it makes no difference. The business also owns no buildings or site, but is Mr. Hazen's tenant and pays him a regular monthly rental. He personally owns the site and treats the money which has gone into the buildings as his personal funds. Thus the business balance sheet is divested of assets invested in buildings whose forced sale value might be vastly different from their book value, and the incident problem of annual depreciation is also eliminated. All the assets of the business are in cash, accounts and merchandise. Its

only liabilities are to the owner, for capital investment, undivided profits and credit on personal account for working funds supplied in addition to original investment.

All this contributes to a clean annual statement, and in the final closing of the books there is another practice that contributes to this. The business has paid rent to Mr. Hazen, and also a regular salary. The rent is based upon the same considerations that would influence a lease from or to outside parties; the salary probably is somewhat low. In addition, in the closing, Mr. Hazen takes interest on the amount of his permanent and floating investment; and with these deductions, together with the usual conventional costs of doing business, the remainder he calls his net profit. It is what his time and money devoted to the business have paid him, over and beyond what they might reasonably be considered worth if he were loaning his money out at the usual interest and selling his service to someone else.

The Inventory Check.

At the end of the year also an inventory is taken to check up on his system of figuring the stock account. Always more stock has been found on hand than is shown by the balance in the merchandise account, but the results have come quite close, the difference usually running from 67 cents to \$1.33 for each \$100 of sales made during the year. One year it was as low as 27 cents that being a year of falling values. Error differences of less than 1½ percent accumulating during a year is working pretty close, considering how the work is done. Stock will come in during the year at widely varying prices for the same item. Stock which cost a specific price is located pretty closely as to pile and that cost used in the figuring until that particular stock is used out. Odd profit figures such as 7 cents would be thrown to even, such as 5 cents, the intention being to balance these differences as much as possible. Mr. Hazen does this figuring himself because of these complications. Once when he was away from home for a couple of weeks Miss Phelps

August 5, 1910					
Debits	Credits			Balance	Dr
*	*		*		*
.28	.15#	Books Aug 3	9,000.00	Books	9,131.28
10.30	3.44#	Dfts " 5	203.80	Mdse	26,815.11*
.42	6.93			Expense	3,100.07
1.20	2.00		9,203.80*	Bank	1,292.40
1.50	17.13	Crds " 5	72.52	Cash	70.01
1.40	2.30				
1.25	4.02#	Books Aug 5	9,131.28		
2.75	.04#				40,408.87*
2.00	.20#				
12.47	2.00#	Mdse Aug 3	27,000.00*	Cr.	
10.75	3.75	Sales " 5	184.89	Capital	30,000.00*
1.05	5.00			P & L	5,214.60
.57	.56#	Mdse Aug 5	26,815.11	Books	5,194.27
2.77	5.00				40,408.87
1.73	20.00				
1.05	Cash	Exp Aug 3	3,093.52		
2.75	62.11*	" 5	6.55	Ledger	
2.75	Mdse Ret.				1,242.62
7.10	.15	" 5	3,100.07*		1,520.00
1.20	3.44				1,271.98
3.06	4.02				1,256.29
3.35	.04	Bank Aug 3	1,113.15		1,701.39
.94	.20	Dep " 5	179.25		1,052.12
1.15	2.00				1,066.88
2.46	.56	Bank " 5	1,292.40*		
4.89	Total				9,131.28*
1.50	72.52*				
2.50		P&L Aug 3	5,139.10		
2.75	.15	" 5	75.50		
3.54	3.44				
10.67	4.02	" 5	5,214.60*		
4.60	.04				
.95	.20				
16.29	2.00	Book Cr	5,194.27#		
4.00	.56				
2.75	Mdse Ret				
2.15	10.41*				
.15					
4.12					
3.75					
23.64					
.29					
38.51					
203.80*					
10.41	Less Mdse Retd				
193.39					
67.00	Cash Sales				
260.39*					
75.50	Profit				
184.89					

Fig. 3. Adding machine statement taken every second day.

did it and he refigured on his return and found very few and unimportant differences. If he would establish standard costs approximating the markets, and whenever a purchase was made at a lower figure charge it to merchandise stock at standard cost and throw the balance into an account for "purchasing profits" the standard cost schedule would greatly simplify the figuring of sales profits and enable Miss Phelps to handle it without any difficulty, a point which Mr. Hazen was very quick to recognize when it was suggested to him. If the market advanced materially on a particular item the standard cost could be changed, the amount in stock approximately inventoried and the profit on it from the advance figured as a market profit, the operation being reversed for market declines, and with these adjustments the profit figuring on sales should produce accurate results without requiring the owner's personal attention in the figuring.

The tickets for current statement are filed in the order of the statement on a small arch binder with a heavy device for punching the proper holes in the tickets. When removed to make room for the next set they are bound together in a packet and kept for as long as may be necessary. In posting to ledger account it is customary with the ordinary run of customers to carry the sales item to the ledger and from there to the monthly statement, referring here to customers who habitually lose their sales tickets. With city customers, business men who keep the individual invoices, this is not carried out. It might be possible, perhaps, to induce the careless customer to reform by printing on the tickets a request that it be preserved, and in other ways; but meanwhile the practical way, or course, is so to render the account as to promote its prompt audit and settlement. This is one of the points on which practice varies widely.

The Ledger Balance.

The reader may be curious to know how the ledger balance of customers' accounts comes off in only seven items, when obviously in a business of this size there must be more open customers' accounts than that. A description of the special ledger used will make this clear. It is a looseleaf book with a large page, with a balance column ruling. It is divided by index sheets into eight sections, seven carrying customers' accounts and one the internal or private accounts. Taking hold of any index tab and pulling it a tablet slides out from inside the index sheet, being permanently attached but coming out perhaps six inches to reveal an erasable tablet, which is renewable as the paper wears out, and which carries in pencil the trial balance for that section of the ledger. This trial balance is changed for each account as postings occur to the account, and is therefore kept up perpetually.

In order to condense and simplify this process, a

My ledger is kept in two sections, termed sales ledger and general ledger, there being separate columns in the cashbook from which to post the different amounts to their respective ledger sections.

S. SHAW, Dresden, Ont.

In a supplementary letter Mr. Shaw says:

In the charge sales column in the book record, should there be any material returned or credited, and with no debit entry, the same is deducted from the following sale or salea.

My aim and claim in bookkeeping is that postings should be made as direct to the ledger as possible, and to eliminate all unnecessary entries, but consistent with proper check or proof as to correctness (as all are liable to mistakes), and this I think is exemplified in this system. The carrying of entries to the cashbook and thence to the ledger I contend is useless, as in this system of posting everything direct to the ledger from slips you are assured that if the totala of your cash sales and on account are correct, then your postings must be correct. My books are kept double entry and books from which postings are made are provided with a separate column for sales and general ledger (even my billbook from which I post direct to ledger), which provides for any entry that could possibly be made. My billbook is also provided with an interest column to provide for interest that may be added to an account or a renewal note, and there is also a column showing the face of the note, the postings of which are both made to their respective accounts each month. In this enclosure there is copy of statement issued to employers each month, the items of which are readily obtained. The explanations herewith, together with former letter, should, I think, give you full understanding of the system.

EDITORIAL DISCUSSION.

It will be noted that the contributor has hardly de-

ORDER			
No. 1			
Dec 20 1910			
Mr. John Smith			
52 Main St			
Checked By <i>ES</i>			
Teamster <i>LG</i>		No. Pile	Chk
200' Corn 12'		1	✓ 16800

Fig. 1. Yard Order, 4x6 in. high, in duplicate.

BOOK 1	Recd. goods as per bill No. 2
M John Smith	
BOOK 1	Dresden, Dec 20 1910
Mr. John Smith	
52 Main St	
In account with SHAW LUMBER CO.	
Accts. will not be rendered in detail, so save this bill.	
Order No. 1	
To 200' 12-ft Corn	480

Fig. 2. Sales Ticket, customer's copy, 4x6 in. high. Note detachable receipt at top.

scribed a complete bookkeeping system, confining himself largely to billing and charging and stockkeeping system; but here he seems to have hit the target plump in the center and such criticism as may be offered will be on details rather than upon the plan itself.

The stock system described is the only one contributed which keeps the record at the pile or bin and in the office as well, checking one against the other. It is, of course, more work than to keep the office record alone, but it is bound to accomplish results, and the other plan has often been tried and abandoned in disgust, because the man keeping the office record did not have the cooperation of the man or men keeping the pile and discrepancies were bound to get in which would not be discovered until long after the opportunity for running them down had passed. Here the man on the yard knows that nothing can happen to the pile without a ticket for it, without its being discovered.

There is one additional detail which would connect the pile record more closely with the actual pile contents. Most stock is dimension, a given number of feet in each piece, and a given number of pieces to the course. Beginning from the bottom and marking the end of the last right hand piece of each fifth course with its numerical number with an indelible lumber crayon, and extending the marking to new lumber as added, the actual pile contents can be determined very quickly at any time by reckoning only from the highest number marked to the top of the pile. On random stock these numbers would show feet instead of pieces. This will

apply, of course, to any bin in which the material is regularly stacked, or to any other merchandise items which can be so arranged in stock as to be taken out in a predetermined order. On items such as saws or planes in hardware stock, where only a few are carried, the record can be dispensed with and balance on hand marked from an actual count of the articles. With the numerical identification suggested certain numbers could be assigned for checking up each day to see that the stock record agrees with the actual stock, thus keeping the record perpetually in line and doing away entirely with the fuss and bother and almost inevitable errors of the yearly or half yearly inventory.

The contributor describes a 1x6-4-foot dressed board for the bin record. Such a piece in most yards is worth, say, 4 to 7 cents; a weatherproof card costs a fraction of a cent, and is better, neater and could be used for stock items where there would be no room for the board convenient to the item which it is to record. A form for such a card is here suggested (Fig. 5). If exposed to weather it must be marked with indelible lumber pencil and should therefore be ruled with ample spaces for large figures.

On the form shown every fifth line is ruled heavy. It probably would serve the purpose of checking the balance and save labor if on the ticket to be entered on this fifth line the balance were noted forward and on other tickets only the bin number, thus giving a check balance with the office record on every fifth item. In the "In" and "Out" columns a small space is provided for bringing down the total of the five tickets for striking the balance. This total may be made in small figures with an ordinary lead pencil, being of only transient use.

Counter Check Book											
	1			2			3				
	Cash	Charge	Cr.	Cash	Charge	Cr.	Cash	Charge	Cr.		
	Sales	Sale		Sales	Sale		Sales	Sale			
1											
2											
3		800									
4											
5			500								
6											
7											
8											
9											

Fig. 4. Corner of Counter Check Book, fifty numbered lines, five sets of columns to page.

INV. NO. <u>29</u>		UNIT <u>Per</u>		
ITEM <u>2x6-10 Item</u>				
DATE	NO.	IN	OUT	BALANCE
1/19				
Forward		217		217
	125		31	
	132		15	
9C	79204	220		
	141		19	
	144		22	
		437	87	350
	203		25	
	Inw Short	2		323
	211		16	

Fig. 5. Pile Card, about 5x12 in., weatherproof tag, printed both sides.

New balance is brought down to "In" column, so only the five new lines need totaling for next balance.

The forms submitted show a duplicate order sheet and a duplicate sales ticket, which is not made until the yard order is filled and returned. Often the sales ticket is made in triplicate, the third copy being provided for a driver's receipt. This is ingeniously avoided here by a perforated stub to be signed by the customer and detached from the ticket that is left with him, being identified with it by the number and requiring no extra writing. Some of our friends are making the sales ticket and its copies act also as the yard order, and would object to the double writing a separate yard form involves. The order form could easily be dispensed with and still without the bother of making a triplicate.

Let the duplicate have the extra columns required for the stock record and hold the original until the duplicate is brought in from the yard. The original is then released to go to the customer, together with the receipt stub, and the duplicate then becomes the office record, both for money posting and stock posting.

The ticket form shown carries two sets of numbers, "Book 1" and consecutive "No. 2." In practice this should be "No. 102," the tickets in Book 1 beginning with 100 and running serially, in Book 2 with 200 etc. If fifty tickets are used to a book, the numbers should run from 00 to 49 instead of from 1 to 50, though this is more important if the numbers from 50 to 99 are also used, as in the flat book form they often are not. Ticket 300 should be the first ticket in Book 3, not the last in Book 2. If two books are used to each hundred numbers, the one beginning with 150 is usually known as Book 1½ or 150 or 1B.

The ledger charging is done direct from the sales tickets, and as each is handled it is listed on the "Counter Check" form, which accumulates the total of charge sales, cash sales and cash on account, to be posted through in daily total to the respective accounts, balancing the individual charges to customers. But one writing of the amount for each ticket is necessary; the lines being numbered up to 50 to correspond with the sales

NAME										ACCOUNT NO.									
ADDRESS										SHEET NO.									
DATE	ITEM	NO.	DEBTS	CREDITS	BALANCE	DATE	ITEM	NO.	DEBTS	CREDITS	BALANCE								

Fig. 6. Stock Ledger ruling for small 5x8 in. loose leaf ledger for branch yard. Mr. Shaw's sketch showed wider item columns, and blanks at top for credit rating and limit.

ticket numbers. There are five of these sets of columns on the form submitted, taking care of five successive sales books. If a merchandise distribution is wanted, the sheet could be arranged for as many classification columns as desired; and as all sales go through these underseored and the date noted. Quantities short or over sheets the class postings could go direct to ledger accounts and only a single column for merchandise carried on the journal, which would, of course, control and balance with the distribution merchandise accounts of the ledger.

The stock record is a book with several sets of columns

Common Sheet 2x8-16 2x10-1														
1			2			3			4			5		
Added	Sold	Bal.	Added	Sold	Bal.	Added	Sold	Bal.	Added	Sold	Bal.	Added	Sold	Bal.
		17000			10000			17400			9400			
200	16000		300	9700		700	16700		8	8600				

Fig. 3. Stock Record, back form, 8.5x13 in. wide.

CASH BOOK											
DATE	NO.	FOL.	SALES LEDG.	INT.	CASH SALES	GENERAL LEDGER	DATE	NO.	FOL.	SALES LEDG.	GENERAL LEDGER
21	20		50.00		5.00						

Fig. 7. Cashbook form, debit and credit sides separated.

to the page, one for each stock item in numerical order. Apparently each item is posted direct from the ticket, which fills the stock record rather rapidly. The second prize system used distribution sheets to take the sales ticket amounts and only the weekly totals went to the stock records cards. It is desirable to have an additional column in which to record car numbers on purchases, or order numbers if numerical purchase orders are used, and an additional column for unit prices paid, as a useful running record of cost. Often the minimum quantity to allow before reordering and the quantity to order are also noted at the top of each item. If the suggested plan of periodical checking with actual stock is adopted, balances which have been so verified are to be on inventory should be noted in red ink as a plus or minus quantity in the sold column (never in receipts) and the corrected balance extended. If it seems desirable these can be put into the regular books (at cost price) in a merchandise short and over account, which when closed to profit and loss would show the total of such discrepancies. The contra debit or credit, of course, goes to the merchandise account and this merely segregates the stock discrepancies from the general merchandise results. Stock returned should also be entered in the sold column within a circle to indicate a reversed quantity, as a subtraction from quantity sold rather than in bought column as an addition to quantity bought,

Shop Ticket Hawkeye Lumber and Coal Co.

F AVENUE BY THE DAM, CEDAR RAPIDS, IOWA

No.1082.....

Name.....

Job.....

Date.....191...

Time.....

Cost: L \$.....

M \$.....

Item	Pieces	Thick	Wide	Long	Feet	Wd.	Grade	WORKING DIRECTIONS
1								
2								

Fig. 4. Shop ticket, 7.5x10.5 inches long, blank numbered duplicate.

which it is not, as the contributor says. The contributor posts directly to customer's ledger account and makes his monthly statement from it, a general practice; but an improved time-saving method has

already been described in previous articles. The indebtedness of the lumber trade in general to Mr. Shaw for having contributed a method of keeping stock that is bound to work if given a half-way fair chance is, however, a sufficient halo for any one lumber accountant. One of the above suggestions involved two additional columns on the sales ticket duplicate to take the stock entries, doing away with the separate yard order form. The corresponding space on the original or customer's copy would be dead space. The original might be that much narrower, but to make sales books that way is much more expensive. Mr. Tessman in his customer's invoice used the left margin, which on the original and triplicate was needed as a binding margin for the post binders, for a well worded printed reminder of the terms of settlement, and this plan could well be followed in arranging the form suggested, or the customer's detachable receipt described by Mr. Shaw could be well arranged for this space.

A Complete Set of Numbered Blanks for Initial Records—A Useful Shop Ticket for Planing Mill Work—How the Stock Record Is Kept—Miscellaneous Kinks.

SYSTEMS OF THE HAWKEYE LUMBER AND COAL COMPANY.

It might be anticipated that two such methodical gentlemen as those connected with "Hawkeye by the

Who:.....

Where:

When Wanted:

When Promised:.....

..... Job

Order Taken by.....

Read back: Yes...No....

1—all loaded; 2—only.....loaded; 3—no more in stock; 4—to be ordered; 5—rush

No.....191...

Purchase Orders Nos.....for items

No.....

Shop Orders Nos.....for items

No.....

Loaded by.....

Driver.....

BIN	NO.	PIECES	THICK	WIDE	LONG	FEET	GRADE	WOOD	CHECK	NO., NAME OR DESCRIPTION	PRICE	AMOUNT
	1											
	2											
	14											
	15											

HAWKEYE LUMBER & COAL CO.

F. AVE. BY THE DAM

JOHN W. BARRY

PRES.

Res. 1448

W. H. MCCLINTOCK

SEC. & TREAS.

Res. 2004 Black

PHONE

769

Cedar Rapids, Iowa

Fig. 1. Telephone slip or order, 6x8 inches wide, in pads, no duplicate.

Fig. 1 herewith shows the printed form which is put up in pads and used for the first record of orders received by 'phone or taken at the counter. In many yards the first printed blank is the duplicate ticket; but where a machine is used it is obvious that orders taken by 'phone will in most cases be jotted down as a memorandum and transferred to the ticket later. The form here shown serves to record this initial memorandum in a complete way with about half the writing that otherwise would be required. It will be

Fig. 6. Stock card, standard size 5x8 inches wide.

Fig. 2. Customer's invoice, quadruplicate machine ticket, 6.5x9 inches long.

The invoice form is twenty-five item lines in length.

[illegible]

JOHN W. BARRY, President	W. H. McCLINTOCK, Secy. and Treas.	
Cedar Rapids, Iowa		
ORDER NO. <u>955</u>	<u>190</u>	
TO _____		
AT _____		
Please Ship, Via C. & N.-W. R. R. or Care of C. & N.-W. at First Interchanging Point,		
To HAWKEYE LUMBER & COAL CO. (Inc.)		
CEDAR RAPIDS, IOWA		
When	Terms Regular	

No.	PIECES	THICK	WIDE	LONG	FEET	GRADE	NAME AND FURTHER DESCRIPTION	DELIVERED PRICE
1								
17								
18								

tons of _____	Coal at \$ _____	per ton F. O. B. _____
tons of _____	Coal at \$ _____	per ton F. O. B. _____
tons of _____	Coal at \$ _____	per ton F. O. B. _____

If anything in above suggests an error on our part, please kindly call attention to same before shipment.

Very truly,
HAWKEYE LUMBER & COAL CO.

By _____

This stock record is posted direct from the sales tickets and purchase order invoices. The two columns carry totals only. If the sold column shows 842 and seven units of this kind are sold, instead of setting down the 7 it is added mentally and set down 849, the progressive total. To get the balance on hand at any

Fig. 3. Purchase order, 8.5x11 inches long, blank numbered duplicate, book bound, original perforated to tear out.

which reference is made. The Hawkeye method of storing and caring for its stock is very complete and comprehensive, but this belongs to yard system rather than office system, which is the subject here under consideration.

A set of carefully worked out forms such as have here been described not only assist in preserving a set business routine but actually save much labor because they serve to describe a transaction with much less writing than is necessary otherwise. They are actually

a double economy, saving labor both in making the record and in its subsequent use, as the particular information needed at any time always appears in its appointed place and it is not necessary to read the entire sheet in order to find it.

L. I. Seibel, Pres.,
Badger Lumber Co.,
Kansas City, Mo.

Dear Sir:-

Your favor of the 6th, relative to the American Lumberman received.

The writer has been reading the American Lumberman almost from the time of its first publication. I consider it the best Lumber Journal in the World today, and do not feel that I could keep house or run a lumber yard successfully without it.

It is worth all it costs to any merchant. We certainly want it to come right along every week. The man who does not get anything out of it is the man who never breaks the wrapper, and the man that lets this magazine come into his office and never looks into it cannot be a very enthusiastic lumberman.

Yours truly,



COST SYSTEM FOR A RETAIL YARD.

The general subject of "Costs" is one that has lately been given a great deal of prominence and attention in all lines of business.

It may seem that much of the system presented herewith is inapplicable to your business, and you may say "red tape." No matter how simple a method or system may be its description on paper invariably appears more complex and cumbersome than it proves in actual application; furthermore the installation of new methods such as I shall describe is an art in itself, requiring not only comprehension of the outlined scheme, but also considerable skill, tact and broadness of mind. Many good and valuable methods have turned out failures owing to incorrect installation, lack of concentration, or failure to introduce such modification as the actual working out in practice demanded.

The general principles that I shall describe can in a great many cases be introduced and carried out in your business without the addition of any considerable number of clerks, and by this I mean without the addition of more than two and in some cases only one assistant to your present book-keeping force.

The ramifications in the building supply business are so numerous I need not try to enumerate them; but the fundamental principles of cost finding are the same the world over and what I desire to do is:

- (1) Outline these fundamental principles underlying all costs.
- (2) Show by means of a few simple forms how such principles can be followed out in the building supply business.
- (3) Give in more or less detail the cost system used by the Charles Warner Company, and show how the facts brought out by the system have been used to increase our net profits. And when all is done and said, that is the real object of our being in business and one of the main reasons why we as an association are here today.

In the first place you must agree with me that the man who devotes his capital and life's energy to any business has the right to expect and demand certain returns from that business to which he is devoting himself. Let us try to figure out what a satisfactory return should be.

From the opinions of many men in the business I think we will be safe in assuming that a normal net profit of from 12 to 15 percent on gross sales should be considered a fair one. This, of course, is in a well established business dealing in staple commodities that are not protected by patents.

In view of the relation between capital involved and gross sales, this means that we should expect a return of from 17 to 20 percent on the capital invested; since through natural investment channels capital can earn 5 percent without business risk.

Let us compare these figures with the facts as they exist

[By WILLIAM A. JORDAN, Wilmington, Del.]

In our business today, and I think you will admit that there is a necessity of some radical action to remedy the conditions. But before we can remedy the conditions we must first find out the conditions.

Admitting for the sake of an argument that taken as a whole our business has returned the necessary 17 or 20 percent on the capital invested, how many of us know what particular department has contributed to this earning or what one has helped to hold it down?

Not once but a score of times, in my professional work, I have found that the losses of one department were being paid from the profits of another. Taken as a whole, the

both as a whole and by departments. Secondly, all cost systems in the same line of business should be on a uniform basis. If one man figures in such items as depreciation or interest on his mortgage debt, and another leaves them out, how can they compete intelligently and how can we have anything but ruinous price cutting? And mind you, the lower selling prices may not be set with a view to actually cutting prices, but solely on account of not having an accurate knowledge of what it costs to do business.

Someone will say, "It takes clerks to run a cost system and we can not afford them." I say, "You can not afford not to have them, if they obtain for you accurate cost figures, which you so badly need and without which you can not run your business intelligently."

I will venture the assertion that a great majority of you do not know your costs. You do not actually know in the several departments of your business whether you are making a profit or a loss, nor do you know the amount of that profit or loss. It is highly probable that at the end of the year you may know that the business, taken as a whole, has either made or lost money. But how many of you know month by month, or week by week, what the business is earning or losing, and which material or department of the business is contributing the loss or the gain?

These are strong statements and exception will probably be taken to them. But I have purposely made them strong with the sole desire to bring you to a realizing sense of the necessity which confronts you. The expense of an additional clerk or two necessary to obtain this information amounts to nothing compared with the results, and from practical experience I can say that it is true economy to obtain them.

I know of at least half a dozen national associations covering the larger businesses of this country that have approached this "cost" question from the same point of view that I would urge the National Builders' Supply Association to approach it, viz.: by the appointment of a committee to investigate and report with the aid of professional advice, on the adoption of a uniform cost system for the various members; and wherever this has been adopted it has been considered by all a most excellent investment.

Elements of Cost.

The prime elements entering into "costs" are quite well understood by almost everyone. This, of course, includes primarily the cost of the materials themselves together with the freight paid to get them to their destination. The labor and expense involved in unloading, handling, storing, re-handling and teaming are also quite well understood. This in many cases constitutes the extent of the cost system. But in addition to this we have what are known as overhead charges or administrative expenses, which in a great many cases are not so well understood. And if they are under-

The image shows two identical requisition forms for stock. Each form has a header section with fields for 'DATE', 'PURCHASE ORDER NO.', 'CHARGE TO', and 'TO S.E.'. The top form is filled out with 'DATE 1/25', 'PURCHASE ORDER NO. 5680', 'CHARGE TO G-400', and 'TO S.E.'. The bottom form is also filled out with the same header information. The main body of the form contains the text '2 Can Magazul Cement' and 'w'. The bottom form also has '1200 Bag' and 'Feb 1st' written in the 'WANTED BY' field. Both forms have a 'DUPLICATE' stamp across the middle and a 'SIGNED' field at the bottom right.

Fig. 1. Requisition for Stock.

condition of the business might be satisfactory or it might not, but the deplorable fact remained that upon the installation of proper cost methods with an analysis of sales, these conditions were found to be a fact. Under certain circumstances it might be possible that this state of affairs would necessarily prevail, and certain materials would have to be handled at a loss. But my contention is that whatever this loss amounts to it should be known month by month and action taken to relieve the situation and to place all departments of the business on a profitable basis.

The most dangerous competition is unintelligent competition, and this is brought about very largely by a lack of definite knowledge in regard to costs. First in importance comes the necessity of each individual knowing his costs,

stood they are not properly prorated against the different departments of the business so as to show true costs.

These overhead charges include such items as taxes, insurance, water rent, light, power, fuel, postage, office supplies, advertising, telegrams, telephones, selling expense, dues and donations, clerks, bookkeepers, collectors, breakage on materials, losses of every character including stock stolen or sent out and not charged, allowances for returned goods, bad debts etc. to infinity. Added to this comes depreciation on the buildings and equipment, also rental on the land and buildings at the same rate you would receive if renting it to others, the value your own services would bring if hired out

to others, and finally interest on your investment at the rate you could loan your money or invest it through safe business channels where no risk whatever would be involved.

It is the proration of these overhead charges and the distribution of current general expenses against the different departments of a business that I shall attempt to describe for the suggestive value it may have in working out your own problems along similar lines.

Manual of Operating and Expense Accounts.

In order to properly collect and segregate charges against the different departments or materials we have adopted

what we call a manual of operating and expense accounts. This is simply to facilitate our work in distributing expenses for supplies, material and labor against the proper department. In a small business, distribution of expenses can very well be kept track of by name, although even in a business of small volume I believe a numerical system of expense account numbers can be used to advantage.

In our particular case we have several manufacturing plants and retail yards and it becomes necessary to designate each plant or yard by a letter. In the case of our Wilmington retail yard, the cost system of which I shall describe, this designation is the letter "G." This manual of expense accounts is printed and placed in the hands of all foremen and clerks who may have occasion to use it.

The general expenses of the yard, such as superintendent, clerks, watchman, office expense, minor injuries, repairs to wharves, railroads, fences, sewers, water mains, driveways, pavements etc., are each designated by numbers from G-1 to G-10.

For example, on the payroll sheets the salary of the superintendent is charged to G-1. A requisition on the storeroom for a bottle of ink is charged to G-3, office expense, while repair bills that might be incurred in repairing the wharves are charged to G-8. This enables us to tell month by month how the general expense is running in its various subdivisions, and also what the total amount of general expense amounts to each month.

This general expense in turn is prorated over the ten or twelve productive departments (materials) on a percentage basis based upon the volume of business as shown by gross sales. This is on the assumption that a department doing twice the business of another should bear twice the amount of the general expense, such as I have enumerated.

Expense accounts G-11 to G-20 cover the selling expenses of the business, such as salesmen's salaries and expenses, advertising, dues and donations, rent of city branch office etc.

The group from G-21 to G-30 includes fixed charges, such as taxes, insurance, interest on investment, depreciation etc. (The distribution of these fixed expenses will be taken up in detail later on.)

The numbers from G-31 to G-40 include the various expense items in connection with our automobile delivery trucks; while the numbers from G-41 to G-50 take care of our sundry teamage expense, such as repairs to stables, repairs to wagons, repairs to harness, shoeing and doctoring horses, feed and bedding, supplies and sundries, labor, percentage of general expense (as noted above), percentage of fixed expense etc.

Productive Departments.

After these general nonproductive or expense groups come about ten or twelve different groups of materials which form classes by themselves and are what we call the productive departments of the business. These are divided in general into such materials as sand, mortar, plaster, anthracite coal, bituminous coal, building brick, pipe and tiling, fire brick

1 2 3 4 5 6 7 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31																																		
Nazareth Cement Company,															C. W. CO. B. O. NO. 5680 ACCT. NO. G 6701 ORDER FCB																			
DUPLICATE PURCHASE ORDER 5680 NOTE CHECKED WITH TRIP. GOODS RECEIVED AS BELOW SENT TO TREAS. QUALITY O. R. EXCEPT AS NOTED ON BACK OF THIS ORDER																																		
PURCHASING DEPARTMENT Nazareth Cement Company, Nazareth, Pa.															PURCHASE ORDER NO. 5680 REQUISITION NO. G 6701 ACCOUNT NUMBER Q-400 WILMINGTON, DEL. DATE 1/24/11.																			
SHIP TO CHARLES WARNER COMPANY AT																																		
Wilmington Retail PLANT Wilmington, Delaware, via P. R. R.																																		
<table border="1"> <thead> <tr> <th>QUANTITY</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>2 1200</td> <td>CARS NAZARETH CEMENT IN DUCK CONTAINING BAGS</td> </tr> </tbody> </table>																															QUANTITY	DESCRIPTION	2 1200	CARS NAZARETH CEMENT IN DUCK CONTAINING BAGS
QUANTITY	DESCRIPTION																																	
2 1200	CARS NAZARETH CEMENT IN DUCK CONTAINING BAGS																																	
WANTED BY FEBRUARY 1st.																																		
INSTRUCTIONS 1. IN ACKNOWLEDGMENT STATE DEFINITE DELIVERY DATE 2. ACKNOWLEDGE BY OUR ORDER NUMBER 3. SEND BILLS IN DUPLICATE TO WILMINGTON, OCLAWARE 4. SEND SEPARATE BILLS IMMEDIATELY FOR EACH ORDER NUMBER 5. THIS ORDER MUST NOT BE FILLED AT A HIGHER RATE THAN LAST QUOTED. 6. PREPAY FREIGHT TO ALL PLANTS WHETHER F. O. B. SHIPPING POINT OR PLANT.																																		
SIGNED CHARLES WARNER COMPANY <i>John Warner</i> PURCHASING AGENT																																		

Fig. 2. Purchase Order.

In general these operating accounts run as follows, taking for example the material "sand:"

- G-61. Repairs—Labor; all repairs to unloading equipment.
- 62. Repairs—Material; all repairs to unloading equipment.
- 63. Power and light.
- 64. Supplies and sundries.
- 65. Direct labor—Productive.
- 66. Percentage of general expense.
- 67. Percentage of fixed expense.
- 68. Cost of material alongside wharf.
- 69. Teamage.
- 70. Selling expense (proportion).

This list of expense account numbers is uniform in all departments and in all yards. That is to say, the labor

ARTICLE		UNIT		DATE		DATE		DATE	
Cement- Mazard		Bag		4/10 7/11		4/10 7/11		4/10 7/11	
FORM NO. 1, REV. 8-12		ORDER		600 600		600 600		600 600	
QUANTITY		QUANTITY		QUANTITY		QUANTITY		QUANTITY	
DATE	QUANTITY	PRICE	AMOUNT	DATE	QUANTITY	PRICE	AMOUNT	DATE	QUANTITY
10/10	1700	1700	1700	10/11	1700	1700	1700	10/11	1700
11/10	1700	1700	1700	11/11	1700	1700	1700	11/11	1700
12/10	1700	1700	1700	12/11	1700	1700	1700	12/11	1700
1/11	1700	1700	1700	1/12	1700	1700	1700	1/12	1700
2/11	1700	1700	1700	2/12	1700	1700	1700	2/12	1700
3/11	1700	1700	1700	3/12	1700	1700	1700	3/12	1700
4/11	1700	1700	1700	4/12	1700	1700	1700	4/12	1700
5/11	1700	1700	1700	5/12	1700	1700	1700	5/12	1700
6/11	1700	1700	1700	6/12	1700	1700	1700	6/12	1700
7/11	1700	1700	1700	7/12	1700	1700	1700	7/12	1700
8/11	1700	1700	1700	8/12	1700	1700	1700	8/12	1700
9/11	1700	1700	1700	9/12	1700	1700	1700	9/12	1700
10/11	1700	1700	1700	10/12	1700	1700	1700	10/12	1700
11/11	1700	1700	1700	11/12	1700	1700	1700	11/12	1700
12/11	1700	1700	1700	12/12	1700	1700	1700	12/12	1700
1/12	1700	1700	1700	1/13	1700	1700	1700	1/13	1700
2/12	1700	1700	1700	2/13	1700	1700	1700	2/13	1700
3/12	1700	1700	1700	3/13	1700	1700	1700	3/13	1700
4/12	1700	1700	1700	4/13	1700	1700	1700	4/13	1700
5/12	1700	1700	1700	5/13	1700	1700	1700	5/13	1700
6/12	1700	1700	1700	6/13	1700	1700	1700	6/13	1700
7/12	1700	1700	1700	7/13	1700	1700	1700	7/13	1700
8/12	1700	1700	1700	8/13	1700	1700	1700	8/13	1700
9/12	1700	1700	1700	9/13	1700	1700	1700	9/13	1700
10/12	1700	1700	1700	10/13	1700	1700	1700	10/13	1700
11/12	1700	1700	1700	11/13	1700	1700	1700	11/13	1700
12/12	1700	1700	1700	12/13	1700	1700	1700	12/13	1700
1/13	1700	1700	1700	1/14	1700	1700	1700	1/14	1700
2/13	1700	1700	1700	2/14	1700	1700	1700	2/14	1700
3/13	1700	1700	1700	3/14	1700	1700	1700	3/14	1700
4/13	1700	1700	1700	4/14	1700	1700	1700	4/14	1700
5/13	1700	1700	1700	5/14	1700	1700	1700	5/14	1700
6/13	1700	1700	1700	6/14	1700	1700	1700	6/14	1700
7/13	1700	1700	1700	7/14	1700	1700	1700	7/14	1700
8/13	1700	1700	1700	8/14	1700	1700	1700	8/14	1700
9/13	1700	1700	1700	9/14	1700	1700	1700	9/14	1700
10/13	1700	1700	1700	10/14	1700	1700	1700	10/14	1700
11/13	1700	1700	1700	11/14	1700	1700	1700	11/14	1700
12/13	1700	1700	1700	12/14	1700	1700	1700	12/14	1700
1/14	1700	1700	1700	1/15	1700	1700	1700	1/15	1700
2/14	1700	1700	1700	2/15	1700	1700	1700	2/15	1700
3/14	1700	1700	1700	3/15	1700	1700	1700	3/15	1700
4/14	1700	1700	1700	4/15	1700	1700	1700	4/15	1700
5/14	1700	1700	1700	5/15	1700	1700	1700	5/15	1700
6/14	1700	1700	1700	6/15	1700	1700	1700	6/15	1700
7/14	1700	1700	1700	7/15	1700	1700	1700	7/15	1700
8/14	1700	1700	1700	8/15	1700	1700	1700	8/15	1700
9/14	1700	1700	1700	9/15	1700	1700	1700	9/15	1700
10/14	1700	1700	1700	10/15	1700	1700	1700	10/15	1700
11/14	1700	1700	1700	11/15	1700	1700	1700	11/15	1700
12/14	1700	1700	1700	12/15	1700	1700	1700	12/15	1700
1/15	1700	1700	1700	1/16	1700	1700	1700	1/16	1700
2/15	1700	1700	1700	2/16	1700	1700	1700	2/16	1700
3/15	1700	1700	1700	3/16	1700	1700	1700	3/16	1700
4/15	1700	1700	1700	4/16	1700	1700	1700	4/16	1700
5/15	1700	1700	1700	5/16	1700	1700	1700	5/16	1700
6/15	1700	1700	1700	6/16	1700	1700	1700	6/16	1700
7/15	1700	1700	1700	7/16	1700	1700	1700	7/16	1700
8/15	1700	1700	1700	8/16	1700	1700	1700	8/16	1700
9/15	1700	1700	1700	9/16	1700	1700	1700	9/16	1700
10/15	1700	1700	1700	10/16	1700	1700	1700	10/16	1700
11/15	1700	1700	1700	11/16	1700	1700	1700	11/16	1700
12/15	1700	1700	1700	12/16	1700	1700	1700	12/16	1700
1/16	1700	1700	1700	1/17	1700	1700	1700	1/17	1700
2/16	1700	1700	1700	2/17	1700	1700	1700	2/17	1700
3/16	1700	1700	1700	3/17	1700	1700	1700	3/17	1700
4/16	1700	1700	1700	4/17	1700	1700	1700	4/17	1700
5/16	1700	1700	1700	5/17	1700	1700	1700	5/17	1700
6/16	1700	1700	1700	6/17	1700	1700	1700	6/17	1700
7/16	1700	1700	1700	7/17	1700	1700	1700	7/17	1700
8/16	1700	1700	1700	8/17	1700	1700	1700	8/17	1700
9/16	1700	1700	1700	9/17	1700	1700	1700	9/17	1700
10/16	1700	1700	1700	10/17	1700	1700	1700	10/17	1700
11/16	1700	1700	1700	11/17	1700	1700	1700	11/17	1700
12/16	1700	1700	1700	12/17	1700	1700	1700	12/17	1700
1/17	1700	1700	1700	1/18	1700	1700	1700	1/18	1700
2/17	1700	1700	1700	2/18	1700	1700	1700	2/18	1700
3/17	1700	1700	1700	3/18	1700	1700	1700	3/18	1700
4/17	1700	1700	1700	4/18	1700	1700	1700	4/18	1700
5/17	1700	1700	1700	5/18	1700	1700	1700	5/18	1700
6/17	1700	1700	1700	6/18	1700	1700	1700	6/18	1700
7/17	1700	1700	1700	7/18	1700	1700	1700	7/18	1700
8/17	1700	1700	1700	8/18	1700	1700	1700	8/18	1700
9/17	1700	1700	1700	9/18	1700	1700	1700	9/18	1700
10/17	1700	1700	1700	10/18	1700	1700	1700	10/18	1700
11/17	1700	1700	1700	11/18	1700	1700	1700	11/18	1700
12/17	1700	1700	1700	12/18	1700	1700	1700	12/18	1700
1/18	1700	1700	1700	1/19	1700	1700	1700	1/19	1700
2/18	1700	1700	1700	2/19	1700	1700	1700	2/19	1700
3/18	1700	1700	1700	3/19	1700	1700	1700	3/19	1700
4/18	1700	1700	1700	4/19	1700	1700	1700	4/19	1700
5/18	1700	1700	1700	5/19	1700	1700	1700	5/19	1700
6/18	1700	1700	1700	6/19	1700	1700	1700	6/19	1700
7/18	1700	1700	1700	7/19	1700	1700	1700	7/19	1700
8/18	1700	1700	1700	8/19	1700	1700	1700	8/19	1700
9/18	1700	1700	1700	9/19	1700	1700	1700	9/19	1700
10/18	1700	1700	1700	10/19	1700	1700	1700	10/19	1700
11/18	1700	1700	1700	11/19	1700	1700	1700	11/19	1700
12/18	1700	1700	1700	12/19	1700	1700	1700	12/19	1700
1/19	1700	1700	1700	1/20	1700	1700	1700	1/20	1700
2/19	1700	1700	1700	2/20	1700	1700	1700	2/20	1700
3/19	1700	1700	1700	3/20	1700	1700	1700	3/20	1700
4/19	1700	1700	1700	4/20	1700	1700	1700	4/20	1700
5/19	1700	1700	1700	5/20	1700	1700	1700	5/20	1700
6/19	1700	1700	1700	6/20	1700	1700	1700	6/20	1700
7/19	1700	1700	1700	7/20	1700	1700	1700	7/20	1700
8/19	1700	1700	1700	8/20	1700	1700	1700	8/20	1700
9/19	1700	1700	1700	9/20	1700	1700	1700	9/20	1700
10/19	1700	1700	1700	10/20	1700	1700	1700	10/20	1700
11/19	1700	1700	1700	11/20	1700	1700	1700	11/20	1700
12/19	1700	1700	1700	12/20	1700	1700	1700	12/20	1700
1/20	1700	1700	1700	1/21	1700	1700	1700	1/21	1700
2/20	1700	1700	1700	2/21	1700	1700	1700	2/21	1700
3/20	1700	1700	1700	3/21	1700	1700	1700	3/21	1700
4/20	1700	1700	1700	4/21	1700	1700	1700	4/21	1700
5/20	1700	1700	1700	5/21	1700	1700	1700	5/21	1700
6/20	1700	1700	1700	6/21	1700	1700	1700	6/21	1700
7/20	1700	1700	1700	7/21	1700	1700	1700	7/21	1700
8/20	1700	1700	1700	8/21	1700	1700	1700	8/21	1700
9/20	1700	1700	1700	9/21	1700	1700	1700	9/21	1700
10/20	1700	1700	1700	10/21	1700	1700	1700	10/21	1700
11/20	1700	1700	1700	11/21	1700	1700	1700	11/21	1700
12/20	1700	1700	1700	12/21	1700	1700	1700	12/21	1700
1/21	1700	1700	1700	1/22	1700	1700	1700	1/22	1700
2/21	1700	1700	1700	2/22	1700	1700	1700	2/22	1700
3/21	1700	1700	1700	3/22	1700	1700	1700	3/22	1700
4/21	1700	1700	1700	4/22	1700	1700	1700	4/22	1700
5/21	170								

account number in all cases ends in "5" and is always 65, 75, 85 etc., while different yards are differentiated by means of letters.

The accounts so far described are all operating or expense accounts. Beginning with G-400 we have what we call our capital or asset accounts, such as stock, stores, land, buildings, railroad tracks, machinery, equipment, horses and wagons, furniture and fixtures etc.

I have gone into this matter of our manual of account numbers at such length because it forms one of the fundamental principles upon which the entire cost finding system is based. It enables the timekeepers or foremen to know exactly where to charge all labor costs; it enables us to charge all supplies exactly where they belong. By placing these numbers on requisitions for material, the bookkeeping

It not only forms the basis of cost finding methods, but it enables us to compare month by month the expenses incurred by any particular number or group of numbers, and also to find the expense per ton or per unit on any material that we desire. All materials are reduced to a tonnage basis and delivery and other costs figured on this basis.

A team record is carefully kept showing the number of hours teams are employed on any particular material and the entire stable expense, as shown by the account numbers, is carefully prorated over the different materials in proportion to the horse hours consumed by each one.

All requisitions, either for stock chargeable to account G-400, or for supplies to be carried in the storeroom, are made in duplicate on the purchasing department on the form shown in Fig. 1. After being O. K'd by the superintendent, the original comes to the purchasing department which places the order, and the duplicate remains filed in the yard office to be used by the superintendent or chief clerk in following up or urging the purchasing department.

The purchase order as shown in Fig. 2 consists of three parts; the original which goes to the seller, the duplicate which goes to the man making out the requisition and acts as a receiving slip, and the triplicate, a standard 5x8 buff colored card, which is used by the purchasing department in following up deliveries. The original contains a number of instructions at the bottom which do not need to go on the duplicate or triplicate, and is therefore made 6x8. It is also designed to go in an outlook envelope. The duplicate is perforated at the left so that the figures showing the quantity ordered may be torn off before going to the receiving clerk. This necessitates his counting or weighing the material very carefully and inserting this quantity on the duplicate before returning it to the purchasing department. The triplicate has the numbers of the days across the top and a clip placed at any particular day shows the clerk that this material should be followed up on that date.

The original requisition has on it the account number to which this material should be charged and this in turn is transferred to the order. In checking up invoices this enables the clerk to place this account number on the bill, thus insuring the proper distribution.

A perpetual card inventory, reproduced in Fig. 3, is kept of all stock on hand. This also acts as a record of average cost prices and shows the amount of material bought of any particular firm in a given length of time.

One very useful feature of this record is that it shows the minimum quantity that should be held in stock at any time and the number of units to order when the stock

Another feature of this card that we have found very useful is in having the 'balance available' column filled out, even though the material itself may not actually have been removed from stock. If it is already called for on orders, it is not available for future use and, therefore, the column "Balance available" shows the true condition of the stock with respect to this particular article.

In connection with our perpetual inventory, it might be of interest to state that the accumulated error for one year between our stock record cards and our actual physical inventory was slightly over one-third of 1 percent.

The general plan of having a requisition for obtaining any material is followed out in our storeroom. This storeroom is under lock and key, and if anyone wants miscellaneous supplies for use about the yard they must have a requisition

REQUISITION NO. 12822		ACCOUNT No. G 46
DATE 1/23/11		NOTE: USE SEPARATE REQUISITION FOR EACH ACCOUNT NUMBER
QUANTITY	DESCRIPTION	MONEY VALUE
2	Broome	40
APPROVED Nac	DELIVERED BY D. CB	
	FOREMAN	

(Fig. 4) O. K. d by the foreman and charged to its proper account number. These requisitions are deducted from the store record cards, priced and filed numerically by their account number. At the end of the month it becomes a simple adding machine job to summarize the amount of the money chargeable to the various account numbers.

Having taken care of the material, both for stock and for stores to this point, we now come to the recording of the labor item, which is a considerable one. Following out the same general idea of the distribution of expense and labor to various account numbers as described in the manual, it becomes necessary to have a payroll system adapted to this use. We therefore have a loose leaf payroll sheet as shown in Fig. 5. Each foreman has a loose leaf book in which he

carries these sheets arranged numerically by the men's numbers. The interesting thing about these payroll sheets is that a man may work on seven different jobs in as many different departments in a week and yet have his time distributed day by day or hour by hour. This makes the weekly work of distributing the payroll to the proper departments comparatively simple.

These original payroll slips are not copied to any other payroll book, but in themselves form the payroll. They are simply summarized by account numbers, and the various labor accounts charged with the total amounts.

DEPT.	NAME						NO.
G	Joe Black						131
FORM 88							
WEEK ENDING	ACCOUNT NUMBERS						
1/19/11	65	75	85	115	125	145	
FRI.	10						
SAT.	5						
SUN.							
MON.			10				
TUES.				10			
WED.					10		
THURS.						10	
TOTAL	10	5	10	10	10	10	
15¢ RATE							
AMOUNT	1.50	.75	1.00	1.00	1.00	1.00	
REMARKS	GROSS WAGES						
	DEDUCTIONS ON BONUS						
	NET WAGES 8.25						

Fig. 5. Loose-Leaf Time Sheet.

Thus it will be seen with very little effort on the part of the foreman the time of each man about the yard is properly distributed to some account number, and the payroll sheets coming into the office in this form greatly facilitate the work in that department.

Pink Slips.

Fig. 6 shows what we call our "pink slip." This is really an order on the warehouse or yard to deliver certain materials to a driver, and is made out at the office and countersigned by the foreman in the department where this material is kept. These slips, pink in color, are made in duplicate. The original is O. K'd by the foreman and has marked on it the weight by the scale clerk. It is then priced and deducted from the perpetual stock inventory card, after which it goes to the customer as a memorandum of that particular shipment, and is used by him to check up the monthly bill which he receives later. The duplicate forms the authority for making the daily charge to the various customers on their monthly bill and statement as shown in Fig. 7.

(For Figs. 6 and 7 see pages 14 and 15.)

The monthly bill and statement is sent to the customer at the end of each month, while the duplicate is filed as the ledger account of the customer.

Proportioning Overhead Charges.

Having taken care of all direct expenses such as repairs, supplies and sundries, labor etc. we come to a consideration of the distribution of general expense, or as they are known, "overhead charges."

The first prorated amount is that of general expense as called for by account G-236 in Fig. 8. These expenses consist of the superintendent, watchman, clerks, office expense, legal expense, minor injuries and general repairs to the driveways, fences etc. In other words, all expenses of a general operating nature which can not be directly charged to any particular department.

There is no hard and fast rule in regard to the basis of distribution of this general expense. In our case we took the money value of the sales in the ten different departments as a starting point. We then called upon the different men who had had years of experience in the business and asked them if, in their opinion, this percentage represented the proportion of general expense that should be charged against each particular department. In some cases this percentage was based on the tonnage, as the expense was not in proportion to the money value of the sales.

This is a point which each one will have to determine for themselves, but the main fact to be remembered is that this general expense should be known each month, and each month distributed to the active operating departments in some just and equitable proportion.

It will be seen by reference to the cost card (Fig. 8) that a line is drawn at this point, and the expenses to here form what we call our prime cost. It is to this point that the

superintendent of the yard can be held responsible, but he is not responsible for the fixed expenses or the cost of materials handled which go to make up the total cost.

Account number G-237 shows the amount of fixed charges against the departments. By "fixed charges" we mean the group of numbers from G-21 to G-30. This includes taxes, insurance, depreciation, interest on investment and salaries and expenses allowed to partners or officers of the company (administrative expense).

The amount of these expenses is generally known and fixed for the year, and are to be divided into twelve equal parts and charged against the department as a fixed amount each month. In determining what these fixed expenses shall be against a department we determined among other things

CHARLES WARNER COMPANY		
DUPLICATE		
1/23/11		No 26867
D. A. Daboe & Co 14th & Delaware Ave		
CHARLES WARNER COMPANY		
WAREHOUSE ORDER		
Wilmington, Del.		1/23/11 No 26867
D. A. Daboe & Co 14th & Delaware Ave		
DESCRIPTION		
1 Load Sand	4300	\$3.01
DELIVER NO GOODS WITHOUT A REGULAR ORDER IF GOODS ARE NOT IN STOCK RETURN ORDER TO OFFICE		

Fig. 6. "Pink Slip" or Warehouse Order.

the number of square feet of land, or the number of square feet of space in a building occupied by each one. The next item for consideration is the asset or inventory value of the buildings, machinery or equipment used by this particular department.

In case of the taxes the amount was distributed in proportion to the square feet of ground occupied, and also on the value of the buildings.

Insurance is figured directly on the buildings themselves and in case of two or more departments occupying one building this expense is prorated in proportion to the number of square feet occupied.

Depreciation is figured as a percentage on the inventory value of the buildings, machinery or equipment, while interest on investment is taken as a percentage on this same asset value.

This leaves only the administrative expense to be prorated, and this is distributed the same as the general expense described above, namely in proportion to the amount of sales in each department or as may be determined by experience.

Taken as a whole, we find the fixed expense as shown in our sample cost card under account G-237 amounts to \$153.90 a month or a total of \$1,846.80 a year.

The material costs are obtained at the end of the month from the summary of the duplicate pink slips in connection with the average prices as shown by the perpetual stock inventory card.

The addition at this point shows the total cost of the material together with the labor of handling it and its proportion of general expense and its proportion of fixed expense, and becomes the total cost at the yard gate. The quantity or tonnage shown is also obtained from the duplicate pink slips and is transferred to the cost card from the daily summary.

Dividing the prime cost by the number of tons sold, we obtain the prime cost a ton. In the same way the fixed and material cost per ton is obtained and the cost per ton at the yard gate. In fact, each one of the expense items might be divided by the quantity sold in order to obtain the various costs per unit. Also the percentage that the prime cost bears to the material cost etc., could be found.

We now come to one of the most important items in the entire building supply business, namely the teamage. At least we have found it so.

Teamage.

The teamage charge against each material or department is ascertained in the following manner:

We have what are known as teamage sheets, on which a careful record is kept of the time teams come in the yard and the time they leave the yard, and also the material that they are employed in teaming. From this sheet we are able to total up the number of horse hours employed in all departments and also the number employed in each par-

ticular department. The total monthly expense of the stable and drivers is then divided by the total number of horse hours and the cost per horse hour obtained. Teamage expense is then distributed against the different commodities in proportion to the number of horse hours, and thus we have a very accurate distribution of this expense. Extra hauling beyond the city limits is charged for, and when subtracted from our total teamage cost gives us our net teamage.

The number of tons teamed is generally less than the number of tons sold for the simple reason that a few customers do their own teaming. Dividing this net cost of teamage by the tons teamed, we have the teamage cost per ton for an average haul of two miles.

The average teamage cost per ton, shown in Fig. 8,

**CHARLES WARNER COMPANY'S
CITY LEDGER ACCOUNT**

6684

WITH

Messrs. F. A. Deball & Co.,
16th & Delaware Ave.,
City.

DATE Jan. 31, 1911.

NO.	QUANTITY	DEPARTMENT	LOCATION	UNIT	QUANTITY	REMARKS	AMOUNT		
From W. H. 110									
To MANUFACTURERS AND DISTRIBUTORS									
CROCKERY, LINEN, AND PLASTER, BUTTER, AND EGGS, FISH, COAL, ICE, STORAGE									
Messrs. F. A. Deball & Co.,									
16th & Delaware Ave.,									
City.									

25 45000
26 7500
26 8-201
26 80000
26 80000
26 18000
27 10-201
30 80000

To **Charles Warner Company, Dr.**

WILMINGTON, DELAWARE
DATE Jan. 31, 1911.

NO.	QUANTITY	DEPARTMENT	LOCATION	UNIT	QUANTITY	REMARKS	AMOUNT		
		To Bal. on Prior Accounts Forwarded							
		To Bal. on 1910 Monthly Statements							
				December Account					
25	45000	Sand	16th & Del. Ave.	.07	3.01				450.50
26	7500	Lime	"	.13	2.88				
26	8-201	S. Cement	"	1.00	4.80				
25	80000	Rough	"	.13	5.90				
26	80000	Sand	"	.07	2.70				
26	18000	Rough	"	.23	2.08				
27	10-201	S. Cement	"	1.30	16.00				
30	80000	Rough	"	.13	5.90				
								39.58	
									\$469.80

Fig. 7. Monthly Bill and Ledger Account.

amounted to \$0.464 for the year. This seems to bear out the general proposition that the teamage costs were running about \$0.50 a ton. In a number of cases this was true, but we found upon analysis that the cost in one of our heaviest tonnages averaged \$0.99 a ton owing to peculiar conditions due to the material. Specific cases such as this, will be taken up and discussed later.

Selling Expense.

Before we can arrive at the total delivered cost a ton we must add to each department the prorata cost of our selling expense. These percentages are determined in the same way that the general expense is determined; namely, in proportion to the amount of gross sales in each department modified by the judgment of the men most closely in touch with the sales conditions, but in general we may say that the selling expense is in proportion to the sales.

Analysis of Sales.

The next step beyond the cost records, shown in Fig. 8, is the analysis of sales reproduced in Fig. 9. This record is kept on a card and shows the net tonnage each month and the accumulative tonnage for the year up to date. Next comes the amount of sales, from which is subtracted the material costs. This leaves us the gross earnings, against which is charged the operating expenses or prime costs from the cost card, Fig. 8. This leaves us the gross earnings at the yard gate, from which must next be subtracted the delivery expense, which includes teamage and carrying. This leaves us the gross earnings delivered. From this amount is taken the selling expenses already determined, and finally, if there is anything left, the fixed charges are subtracted, leaving a net earning or loss for the department for the month. This loss or gain is accumulated month by month in order to show the total at the end of any particular period of time.

After the accumulated earnings or loss comes various figures showing the average cost a ton for material, operating, teaming, selling, fixed charges etc. These figures are based on sales, whereas the figures shown in Fig. 8 are based on tons teamed and, therefore, do not exactly agree.

Monthly Loss and Gain Statement.

From our analysis of sales card, Fig. 9, there is prepared monthly loss and gain statements bringing together in one place all the vital information in regard to the various materials. These are shown in Figs. 10 and 11, and form a summary of all the analysis cards for use by the executives of the company. Certain percentages that will be useful in analyzing the business are determined on this sheet. Among these are the percentage that the handling, teaming, selling and administrative expense bears to the cost of the material in each department, and the percentage of net profits to gross sales in each department. These monthly loss and

gain statements should also be accumulated so that at the end of any particular month a comparison could be made with the standing of the business as compared with the corresponding number of months of the previous year.

With the accumulated monthly loss and gain statements the system is complete and it only remains to analyze the facts and figures as presented and draw certain conclusions. Finally, necessary action should be taken to correct these figures should they be found unsatisfactory. And by unsatisfactory I mean should it by any chance be found that they were not returning the 12 to 15 percent net profit on the gross sales.

Conclusions.

No cost system is worth the paper it is recorded on if it is not used. Assuming that this statement is correct let us point out the conclusions that can be drawn from the foregoing cost system. Not only can be drawn, but as a matter of fact have been drawn in the last two years' experience of our company.

In the first place, these records are compiled in such a way that they check absolutely with the controlling accounts in the general ledger of the company, and this is a very important point. If cost records do not check with the gen-

eral books they are unreliable and, therefore, worse than useless from the fact that they are misleading.

By proper use of the "Pink Slips," which form the authority for removing material from the yards or warehouses, and the customer's charge sheets, a daily check is obtained that shows us that every ton of material taken from the yards is charged to somebody. This is often a weak point in the system of any business and should be guarded against very carefully.

The maintenance of a perpetual inventory proves very useful in a great many cases. In case of a fire it is undisputable evidence to the insurance companies of the value of the stock on hand and it has been so proven many times in the courts. An accurate record of stock withdrawals over a period of six months or a year shows us exactly the amount of stock we ought to carry. This often saves thousands of dollars of investment in over-stocking. The perpetual inventory card gives us a correct average price when the price of purchased materials may be fluctuating. And finally the balance available enables us to tell instantly whether or not we have certain material in stock and in what quantity. On the whole, the perpetual inventory is a most useful and profitable thing to have.

Coming to the summary of our cost cards, a monthly analysis shows whether or not we are running ahead or behind of the previous month, while the accumulated costs show how we stand with respect to the same period of time for the year previous. Very often when these figures are called to the attention of the superintendent or foreman and a frank talk had with him on the subject it is incentive enough for him to do better the next month. If the cost continued to run high, we must then consider ways and means of changing our methods of handling or of introducing labor saving machinery where it is possible. This cost record will enable us to figure very accurately whether or not the investment in labor saving machinery will be warranted.

Labor costs per unit give us figures to go by and enable us in a number of ways to set piece rates or let out certain work on contracts. We have found this to work particularly well in the unloading of barges of sand or barges of bricks. It is possible to make a scientific time study of such an operation as unloading bricks from barges and many other operations, which at first glance seem illy adapted to putting on piece work. Where piece work rates are set it is of greatest importance that the confidence of the men be obtained. This is brought about in some cases by written assurance that a piece work rate once set will not be changed for a year. When such a statement is made, however, the management must be very certain that they have made a scientific time study of the operation and that their labor cost will be well within the average price as shown by the cost cards.

In drawing conclusions and showing the results to be derived from a properly designed cost system, I might give an example of a reduction in stable costs that was effected

WILMINGTON RETAIL COSTS, 1910.

	A/c No.	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Repairs -- Labor	231	61	---	---	---	---	---	---	---	---	---	---	---	61
" Material	232	---	---	---	---	---	---	---	---	---	---	---	---	---
Power	233	---	---	---	---	---	---	---	---	---	---	---	1 95	1 95
Supplies & Sundries	234	11 20	4 73	---	---	---	8 --	---	2 65	2 65	1 --	9 46	4 73	41 68
Labor	235	128 74	56 07	36 31	49 24	41 63	61 71	36 95	43 63	26 11	29 76	42 36	76 86	637 46
General Expense, 8 %	236	61 68	44 15	49 26	52 74	46 99	90 49	47 95	47 43	49 89	47 28	54 17	62 26	614 93
PRIME COST		206 23	104 95	87 57	101 98	88 62	117 80	86 90	93 61	80 65	78 --	105 98	146 60	1 286 79
Fixed Expenses	237	153 90	153 90	183 90	153 90	153 90	153 90	153 90	153 90	153 90	153 90	153 90	183 90	1 846 60
Carrying Expenses	238	16 66	11 18	16 80	9 24	11 97	19 14	26 10	12 56	23 23	24 66	36 64	32 85	241 64
Material Cost		2 846 56	2 406 23	1 863 62	1 099 53	1 397 96	2 066 31	1 856 03	676 06	938 25	752 22	1 375 68	1 804 36	18 049 62
TOTAL COST		3 223 36	2 875 26	1 641 29	1 304 65	1 658 67	2 366 53	2 126 93	1 136 36	1 196 23	1 006 97	1 469 40	1 539 61	61 435 26
Tons sold		996	854	457	434	490	753	654	344	331	261	462	412	6450
Prime costs per ton		.203	.122	.200	.236	.181	.155	.133	.272	.244	.298	.22	.361	.201
Fixt & other costs		3.033	3.010	3.226	2.771	2.191	2.963	3.119	3.037	3.369	3.567	3.243	3.376	3.166
Cost at yard gate		3.236	3.128	3.526	3.006	3.172	3.123	3.262	3.309	3.615	3.865	3.463	3.736	3.383
Teamage	239	610 56	295 44	206 07	125 37	136 63	395 72	416 94	146 37	144 64	100 36	207 37	201 32	3 076 96
Hauling credits		---	---	---	26 50	13 43	20 20	11 50	---	26 75	---	15 50	15 75	103 63
Net teamage		610 56	295 44	206 07	112 87	123 20	375 52	405 44	143 37	136 09	96 36	191 87	275 67	2 973 33
Tons teamed		983	845	436	426	489	754	662	342	316	257	479	407	6400
Team cost per ton		.621	.35	.461	.278	.252	.498	.612	.419	.427	.374	.40	.77	.46
Retail Selling Exp 10 %	239g	51 36	47 45	64 65	66 60	96 96	50 97	46 16	69 98	46 79	59 98	59 77	75 25	746 66
Tons sold		996	854	437	434	490	753	654	344	331	261	462	412	6450
Selling cost per ton		.051	.055	.148	.168	.196	.067	.071	.261	.147	.229	.124	.182	.115
TOTAL DELIVERED COST PER TON		3.906	3.537	4.136	3.417	3.862	3.686	3.936	3.969	4.169	4.466	3.987	4.595	3.501

* Minus quantities.

Fig. 8. Departmental Cost Sheet.

DEPT.	AMT. OF SALES	COST OF MATL.	GROSS PROFIT	HANDLING, TEAMING, SELLING & AGE. EXPENSE	OPER. 10 MATL. COST	NET PROFIT
1	\$2217.60	\$608.81	\$1611.79	\$644.78	158.2	\$667.03
2	1775.07	1378.88	396.19	560.86	40.78	161.47
3	1167.31	1036.47	2150.84	1603.16	164.8	547.68
4	6641.53	4287.78	1353.77	1084.11	84.8	289.38
5	5638.90	3638.89	1901.01	1018.75	26.8	784.23
6	1163.88	1603.90	1560.03	1679.09	34.5	119.00
7	797.13	465.39	331.54	304.86	43.9	126.89
8	1260.87	969.14	461.15	240.88	23.65	200.27
9	833.61	577.83	358.08	404.03	70.4	48.96
10	788.02	689.87	929.36	816.88	28.2	12.89
	28628.90	18267.65	10254.25	7938.88	43.4	2298.07

•• Loss

DEPT.	AMT. OF SALES	COST OF MATL.	GROSS PROFIT	HANDLING, TEAMING, SELLING & AGE. EXPENSE	OPER. 10 MATL. COST	NET PROFIT
1	\$1519.16	\$367.84	\$1150.88	\$981.96	758.2	\$208.80
2	2285.16	1656.03	406.11	732.00	36.4	366.89
3	2643.56	781.21	1852.07	1563.16	197.8	286.90
4	8850.24	4455.10	1105.16	1001.37	25.	93.87
5	1839.38	1036.58	603.00	491.95	67.8	113.65
6	8715.93	8363.68	2340.09	2041.28	39.0	213.24
7	489.53	183.96	274.86	243.04	126.8	31.95
8	1074.44	783.74	280.70	279.81	36.28	1.08
9	2207.06	1847.18	359.88	568.10	99.8	183.17
10	687.17	429.35	227.86	288.08	10.2	10.16
	26747.45	15177.08	11570.38	9497.77	47.6	27.58

•• Loss.

Fig. 10. Monthly Loss & Gain Statements. The first shows losses which were overcome by the cost system when the second was taken, several months later.

through these records. We have uniform cost records in operation in seven different stables. It was noticed by the management and drawn to the attention of the superintendent that his cost of feed and bedding per horse per month averaged about \$5 more than any of the six other stables. The fact that the six were very nearly the same showed that their average price could be taken as standard. Upon investigation it was found that the stable boss was a grafter, selling oats outside, improperly feeding the horses and generally an "undesirable citizen." Upon his being removed and the superintendent giving his personal attention to the matter of feeding horses and regulating the amount of feed, the cost came down to the same average as the other stables and has so continued for four months. At this rate we will effect a saving of \$5 per horse on fifty horses, which amount to \$250 a month or \$3,000 a year. This is only one example of many similar cases. Without a cost system the business might have been conducted for years on this basis and no one been the wiser.

One of the most far reaching and beneficial effects from

a record of the prime cost per ton of handling material has been the installation of a bonus system for the superintendent and foremen. After several months records were compiled, it was found that the prime costs a ton of material in different departments were running at a fairly uniform rate, showing that the superintendent and foremen had apparently struck their gait. Under the old system this was considered good enough. But under the new order of things we held a meeting of the superintendent and foremen and in fact included in the plan the clerks in the office, and made them a proposition which practically put them in business for themselves. The proposition was this: If these men by increased effort on their part could reduce these costs the company would give them as a bonus 50 percent of all that they saved. This amount was to be divided among the men prorata in proportion to the importance of their positions as indicated by their salaries. If any of you gentlemen have any question in your mind as to the amount of reserved energy a gang of foremen have in getting work out of their men I would recommend that you try this plan.

The subject of teamage costs is a most important one. Too often the assumption is made that the teamage cost a

ton, say for an average haul of two miles, is \$0.50 or whatever figure may be calculated from a year's records. While this may be perfectly true for certain materials, there are always one or two materials which, owing to peculiar conditions, may be far above this. As a matter of fact, our actual cost records showed on one of our important tonnages that the cost a ton for teamage averaged exactly \$0.99, whereas the selling price had been fixed on the assumption that the cost was \$0.50.

The material in question was machine mixed wet mortar. This was manufactured in a separate building of its own with comparatively expensive machinery and hauled to the jobs in steel mortar boxes. The excessive haulage costs arose from the fact that after the box mortar had been used, it was up to us to send a team out and bring back the empty box, thereby practically doubling our teamage cost a ton.

Acting on the cost figures as shown by our records, ways and means were devised to replace the wet mortar by a dry mortar put up in bags, which could be teamed at a normal cost. Not only does this dry mortar effect a saving in teamage, but it is in itself a superior article and its introduction

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Net tonnage sold	1008.36	853.68	436.89	454	490	755	854	344	331	261	488	411.77	
" Cumulative	1008.36	1855.98	2292.87	2746.87	3236.87	3971.87	4825.87	5169.87	5500.87	5761.87	6249.87	6661.64	6455.64
Net Amount of Sales	\$3506.43	\$296.55	\$1595.31	\$1547.33	\$1785.89	\$2602.49	\$2825.14	\$1825.95	\$1198.30	\$1083.67	\$1775.07	\$1586.58	\$23053.39
" Cumulative	\$3506.43	\$493.08	\$6525.19	\$8072.52	\$9858.41	\$12460.90	\$15285.84	\$17111.79	\$18310.09	\$19393.76	\$21168.83	\$22755.41	\$25053.39
Material costs	\$846.56	\$2405.83	\$1894.88	\$1039.53	\$1297.98	\$2068.51	\$1858.05	\$78.06	\$98.25	\$78.88	\$1378.68	\$1204.36	\$18045.83
Gross earnings	\$84.77	\$31.48	\$11.69	\$97.60	\$367.71	\$534.18	\$405.11	\$347.49	\$260.06	\$271.45	\$399.39	\$302.80	\$5003.56
Operating expenses	\$802.53	\$104.55	\$7.57	\$101.98	\$88.82	\$117.20	\$86.90	\$93.81	\$80.85	\$78.00	\$105.98	\$148.50	\$1286.79
Gross earnings at yard (gate)	\$468.54	\$426.37	\$24.12	\$405.82	\$278.89	\$416.98	\$318.21	\$254.06	\$179.80	\$193.45	\$293.41	\$233.70	\$3706.77
Teamage and carrying expense	\$829.82	\$295.44	\$208.07	\$104.81	\$148.80	\$414.86	\$445.04	\$158.95	\$168.07	\$125.20	\$241.21	\$324.17	\$3891.44
Gross earnings delivered	\$146.68	\$130.93	\$16.05	\$271.41	\$130.09	\$8.12	\$168.83	\$95.13	\$11.13	\$68.25	\$58.20	\$90.47	\$415.33
Selling Expense	\$1.36	\$7.45	\$4.65	\$5.60	\$6.98	\$0.97	\$4.16	\$9.98	\$4.75	\$9.98	\$9.77	\$7.88	\$748.88
Gross Earnings sold	\$198.06	\$83.48	\$46.80	\$216.81	\$33.36	\$48.85	\$178.99	\$8.21	\$7.60	\$8.33	\$7.57	\$165.78	\$331.49
Fixed charges	\$153.90	\$153.90	\$153.90	\$153.90	\$153.90	\$153.90	\$153.90	\$153.90	\$153.90	\$153.90	\$153.90	\$153.90	\$1848.80
Net profit or loss	\$361.98	\$70.42	\$800.50	\$81.71	\$120.87	\$258.75	\$308.89	\$148.69	\$151.55	\$145.57	\$211.47	\$319.68	\$319.68
" Cumulative	\$361.98	\$432.40	\$1232.90	\$1314.61	\$1435.48	\$1694.23	\$2003.12	\$2151.81	\$2303.36	\$2448.93	\$2660.40	\$2980.08	\$3299.76
Average sales price per ton	3.33	3.44	3.65	3.55	3.60	3.44	3.45	3.65	3.63	3.98	3.65	3.65	3.573
" material costs	2.845	2.82	2.94	2.395	2.395	2.736	2.841	2.854	2.835	2.834	2.937	2.926	2.80
" operating expense	.802	.183	.00	.208	.181	.125	.133	.127	.127	.127	.127	.127	.127
" team expense	.828	.046	.478	.31	.374	.549	.681	.462	.462	.462	.462	.462	.462
" selling expense	.051	.059	.148	.128	.147	.077	.078	.147	.147	.147	.147	.147	.147
" fixt charges	.133	.18	.053	.304	.314	.204	.205	.447	.465	.465	.465	.465	.465
Total costs	\$3.679	\$3.524	\$4.133	\$3.419	\$3.852	\$3.711	\$3.985	\$3.997	\$4.197	\$4.473	\$4.082	\$4.331	\$3.91
Net profit or loss	-.349	-.004	-.463	-.146	-.250	-.268	-.501	-.432	-.574	-.558	-.336	-.777	-.537

* Minus quantities or losses.

Fig. 9. Analysis of Sales.

is simply a matter of educating the trade. And in this campaign of education we tell our customer very frankly that it is a matter of costs with us, and we have found very few of them but what are fair minded enough to see the force of our arguments.

Our analysis of sales records enable us to determine very accurately what our selling prices should be. But if for any reason selling prices are governed by conditions beyond our control, we know what our losses are in handling that particular material. It is then up to us to bring about certain trade agreements with other dealers or if we are unable to do this, to discourage the sale of that particular commodity.

Without a monthly loss and gain statement, as shown in Fig. 10, we would simply know that in the particular month for which this statement was made the entire department had lost \$27.38 or a little over one-tenth of 1 percent on the gross sales. A condition very much different from the 12 to 15 percent that we decided in the first part of this paper was to be reasonably expected from the business. What department or material had contributed to this loss we could not tell. But with this statement it was very easy to see the departments 2, 6, 9 and 10 had been the principal contributors to it. Department T had also helped, and department 4, in which we had next to the highest sales, had

contributed but 1½ percent of those sales to the profit column.

Certain departments in which the tonnage and gross sales were very heavy and which we naturally concluded were profitable departments, gave us a great shock by showing that they were decidedly unprofitable and that, apparently, the more business we did the more money we lost.

The improved conditions, as shown in the monthly statement, reproduced in Fig. 11, did not come about the month following the statement shown in Fig. 10, by any manner of means nor in six months for that matter. It was only after many months of concentrated thought and effort on the part of the management, of the sales force and of the engineers that these improved conditions were brought about. The facts were brought to our attention and it was up to the management to make their decisions and take the necessary action. It was readily seen that department No. 1 was profitable, returning us 13.74 percent on our sales. Sales effort was increased, the operating was put on a piece work basis and this, together with the help of the general bonus plan to the superintendent and all foremen, brought about decreased costs of handling and teaming with the result that the net profit was increased to 30 percent.

The sales in department No. 2 were discouraged with the

result that instead of a loss of 14.43 percent, we had a loss of only 9.1 percent.

Department No. 3 was a profitable department and increased sales effort and decreased operating expense brought about an increase of over 6 percent in the net profit of the department.

In the same way we might go on and analyze all ten of the departments. Referring to the total figures we find that the business as a whole made a net profit of \$2,298.07 or 8.06 percent on the sales which had been increased only slightly over the amount of sales in the previous statement.

Even though the installation of these methods has cost us a great deal of time and money, nevertheless I will leave it to any fair minded business man if the results are not justifiable, and I can not urge upon you too strongly the necessity of every man in the building supply business today to "go and do likewise."

[The above paper was delivered before the National Builders' Supply Association, and also distributed in pamphlet form. Where the author says "department" the term "branch yard" or "line yard" would be used in the lumber business; he does not mean separate merchandise departments of a given yard.—EDITORS.]

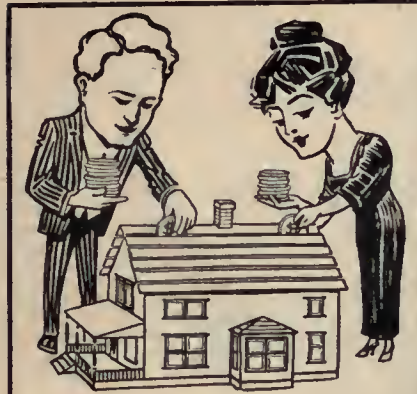
"How to Meet Mail Order Competition."

The articles on this subject, which appeared in the AMERICAN LUMBERMAN in 1912, are now available in booklet form at twenty-five cents a copy, postpaid.

The subject is such an important one to the retail dealer that we felt there were many who would like to have these articles in convenient and permanent form, so that everyone could be supplied, especially as back issues of the AMERICAN LUMBERMAN were not to be had.

The letters on "Collections by Retail Lumber Dealers," that were reprinted in the AMERICAN LUMBERMAN in 1910, are still available at fifteen cents a copy. These letters by AMERICAN LUMBERMAN subscribers give the experiences and suggestions of prominent retailers and offer many excellent ideas on the handling of accounts. It will well repay any dealer to carefully read them.

Free Advertising Service for AMERICAN LUMBERMAN Subscribers.



Put Your Money Into A New Home

this year and make it earn you happiness and contentment. Can't get away from the fact that the home is the mainstay of this great country of ours and never will there be a time when you can buy the kind of lumber we are selling for less money. Better start planning early so as to get the ground broken as soon as the frost is out. We're ready any time to talk about your lumber needs. Come in.

(Name and Address)

Patriotism and Love of Country

can scarcely be expected of children reared by homeless parents with no more serious thought than the present. "Just as the twig is bent, the tree's inclined," and as more recent writers have said, "The home is the backbone of our nation," it behooves all lovers of life, liberty and happiness, and particularly those directing the footsteps of the youth of our country to set a good example. To do this it is not necessary to build a palace and go into debt for life. Wood construction will just meet your requirements. With it you can plan a home of any size you may ultimately desire and then start with a few rooms and build on as your demands require. We have helped many people solve their building problems and would like to help you. Come in and let's talk it over.

"There's No Place Like Home"

Name and Address



We Can Supply Building Material

for any kind of a structure you contemplate building on the shortest notice. Thoroughly seasoned lumber of full thickness and guaranteed quality, shingles or prepared roofings for coverings, framing, etc.—all the pick of the best manufacturers. Come in and look us over—maybe we can save you some money, time and trouble.

(Name and Address)

The ads shown on this page are from the QUARTERLY BULLETINS OF ADVERTISING SUGGESTIONS FOR RETAIL LUMBER DEALERS, furnished free to AMERICAN LUMBERMAN subscribers.

Each bulletin shows twenty ads—twelve illustrated with attractive cuts and eight all type. The illustrated ads are so worded that they can be used with or without illustrations. Electrotypes of illustrations are

furnished at 50 cents each postpaid. Complete ads with space left for name and address are 80 cents each.

If you advertise in your local paper these advertising suggestions would help you keep your ads fresh and attractive and make them better business getters.

We will be glad to send you sample bulletin and tell you all about the service if you are interested.

AMERICAN LUMBERMAN,

431 South Dearborn Street, CHICAGO, ILL.

BOOKS FOR LUMBERMEN.

American Lumberman Telecode

A cypher code adapted to all branches of the lumber trade; 412 pages; 61,427 code words; nearly 4,000 in use. \$5, postpaid.

Lumber Shed Construction

Met L. Saley's new book on construction of lumber sheds, offices and other buildings, with plans. \$1.50.

Realm of the Retailer

The best of Met L. Saley's writings put into permanent form. \$1.50, postpaid.

The Lumberman's Actuary

Shows the cost of any number of feet of lumber between 2 and 29,000 feet at any price from \$6 to \$75 a thousand; also of lath and shingles from 85c to \$6 a thousand. In leather \$4, cloth \$3.50, postpaid.

The American Lumberman's Curiosity Shop

A reference work containing hundreds of practical questions about the lumber business with full and appropriate answers, which, in many cases, embody illustrations. \$2, postpaid.

Chapin's Lumber Reckoner

Reduces to board measure lumber, scantling, square timber and saw logs. Morocco \$3, cloth \$2, postpaid.

In Forest Land

The humor, sentiment and philosophy of the lumber business interpreted by "The Lumberman Poet." \$1.25.

The Coalier's Actuary

For retail lumber dealers who handle coal. Tables show the amount of any quantity of coal from five pounds to 1,100 tons at prices from 25 cents to \$15 a ton and apply to either gross or net tons. In cloth \$2.50, leather \$3, postpaid.

Collections by Retail Lumber Dealers

A series of letters by subscribers to the AMERICAN LUMBERMAN, giving their views on the best way to handle the accounts of a retail lumber business. These letters offer many excellent ideas, and it will well repay any retail lumber dealer to read them carefully. Fifteen cents, postpaid.

Climax Tally Book

For hardwood lumbermen, 110 pages, size closed 4 1/4 x 8 1/4 inches. Finger straps to hold book open when tallying. One copy 75c, six \$4, twelve \$7.50.

The American Lumberman's Vest Pocket Ready Reckoner

Seventy-two pages of tables, showing the contents of any number of pieces of dimension lumber from 1 x 8-10 to 12 x 20-40, including also table of freights, weights of lumber, shingles, lath, doors, sash, blinds, styles of siding and the different log scales. Twenty-five cents, postpaid, five copies \$1.

Dustman's Book of Plans and Building Construction

Covers the construction of modern homes, bungalows, farm buildings, barns, store fronts, store buildings, garages; also the various phases of construction. A good book for the retailer to have to show prospective home builders. Price \$2, postpaid.

Science of Organization and Business Development

By R. J. Frank. A treatise on the law and science of the promotion, organization, reorganization and management of business corporations, with special reference to approved plans and procedure for the financing of modern business enterprises. Morocco, \$2.75.

The Cost of Growing Timber

By R. S. Kellogg and E. A. Ziegler. An interesting exposition of facts and figures. Twenty-five cents.

Craftsman Homes

A book of house plans. Every page replete with unique and original ideas. Heavy canvas crash \$2, postpaid.

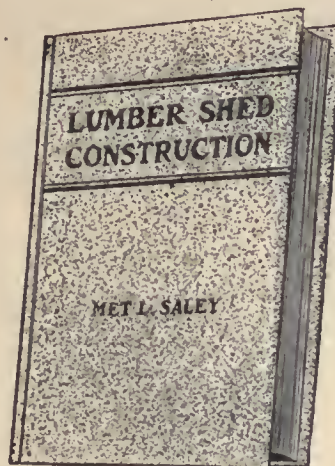
Advertising Suggestions for Retail Lumber Dealers

The AMERICAN LUMBERMAN issues quarterly and supplies free to subscribers to the AMERICAN LUMBERMAN a bulletin of sample advertisements. Plates of these advertisements and of illustrations are also furnished subscribers at cost price. Send for sample bulletin.

Bungalowcraft

A book on bungalow and cottage building in its latest development. Heavy canvas crash \$1.50, postpaid.

AMERICAN LUMBERMAN, 431 S. Dearborn St., CHICAGO, ILL.



LUMBER SHED CONSTRUCTION

MET L. SALEY'S LATEST BOOK

Covers every phase of shed construction and other buildings used in connection with a retail lumber yard, with plans and specifications

SOME OF THE FOLLOWING SUBJECTS TAKEN INTO CONSIDERATION
GIVE AN EXCELLENT IDEA OF THE COMPLETENESS OF THE BOOK

Type of Sheds
Location
The Foundation
Ventilation
The Alley
The Hood
Capacity of Shed
Open Dustproof Room
To Exclude Animals and Birds
Displaying Goods
The Office
How to Build a Lime House
When to Build the Enclosed Shed

The Unloading Deck
Pole Support
The Roof
The Platform
Width of Bin
The Warm Room
The Store Room
Advertising Space
Molding Racks
Storing Timbers
Sheds for End Storage
Origin and Advantage of Sheds

Lumbermen have wanted such a book for years—it is now ready. If you are not sure you want a copy, let us send you one postpaid for examination, with the privilege of returning it if you do not wish to retain it. "Lumber Shed Construction" has 176 pages printed on a high grade sepia paper, durably bound in Russian linen. Sent postpaid anywhere in the United States, Canada or Mexico for \$1.50 a copy.

INDEX.

Anthony, M. P.....	26
Bank Statement.....	28
Cash Forms.....	15, 27, 29, 35, 39
Credit Memos.....	21, 23
Clarke, Archie V.....	33
Cost Sheet.....	50
Counter Book.....	38
Delivery Forms (see also Sales Forms).....	26
Estimate Systems.....	7, 8, 19
Grube, A. K.....	18
Hawkeye Lumber and Coal Co.....	40
Hazen, Wirt M.....	34
Hendrickson, O. M.....	29
Hopkins, Clarence E.....	32
Hunt, James B.....	15
Inventory Card.....	47
Iverson, I. G.....	23
Jordan, William.....	45
Journal Forms.....	6, 12, 16, 22, 25
Ledger Forms.....	31, 39, 49
Leshner, E. J.....	6
Monthly Statements.....	4, 15, 33, 51
Note Registers.....	21, 28
Patricks, William.....	4
Purchase Forms.....	5, 18, 26, 42, 46
Remittance Forms.....	26, 29
Requisition Forms.....	45
Sales Forms and Records.....	4, 5, 7, 14, 20, 24, 27, 29, 32, 37, 38, 41
Shaw, S.....	37
Shop Orders.....	40, 43
Stock Sheet Forms.....	5, 9, 10, 17, 19, 21, 22, 26, 33, 39, 41, 42
Telephone Slip.....	40
Tessman, Gus H.....	11
Time Sheet.....	48
Trial Balance Forms.....	28, 36
Voucher Forms and Records.....	8, 9, 10
Warehouse Order.....	48
Yard Orders (see also Sales Forms).....	38

THIS BOOK IS DUE ON THE LAST DATE
STAMPED BELOW

AN INITIAL FINE OF 25 CENTS
WILL BE ASSESSED FOR FAILURE TO RETURN
THIS BOOK ON THE DATE DUE. THE PENALTY
WILL INCREASE TO 50 CENTS ON THE FOURTH
DAY AND TO \$1.00 ON THE SEVENTH DAY
OVERDUE.

MAY 6 1942 P

6 Sep '55 MCZ

SEP 6 1955 LU

OCT 28 1955

Gaylord
Makers
Syracuse, N. Y.
PAT. JAN. 21, 1908

YD 09789

152610
Almanac
HF5636
-L3A6

UNIVERSITY OF CALIFORNIA LIBRARY

